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 Ser His Pro Val Ala Leu Glu Val Asn Glu Met Tyr Val Phe Cys Tyr  
 65                      70                      75                      80  
 Leu Cys

<210> 2759  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<400> 2759  
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 420  
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 540  
 ccagctctta cctectctg gttgcttttc ttgccccac cccaagtta tttttgtttt  
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 688

<210> 2760  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 2760  
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 Gly Gly Asp Gly Glu Thr Lys Pro Ser Gln Gly Pro Ala Asp Gly Ser  
 20                      25                      30  
 Arg Pro Glu Pro Gln Arg Pro Arg Asn Arg Pro Tyr Phe Gln Arg Arg  
 35                      40                      45  
 Arg Gln Gln Ala Pro Gly Pro Gln Gln Ala Pro Gly Pro Arg Gln Pro  
 50                      55                      60  
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 65                      70                      75                      80  
 Thr Ile Leu Glu

<210> 2761  
 <211> 922  
 <212> DNA  
 <213> Homo sapiens

<400> 2761  
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 cccataactg agggcaataa agagccagat aagacctggg tgaaaaaggg agagcccctc  
 180  
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 240  
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 360  
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 420  
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 480  
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 660  
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 720  
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 780  
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 922

<210> 2762  
 <211> 307  
 <212> PRT  
 <213> Homo sapiens

<400> 2762  
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 Ser Ser Leu Ser Gln Ala Gly Asp Pro Ile Thr Glu Gly Asn Lys Glu  
 35 40 45  
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu

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      50              55              60
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65              70              75              80
Leu Glu Ser Thr Leu Asp Asn Ser Cys Gln Gly Ala Gln Met Asp Asn
      85              90              95
Lys Ser Glu Val Gln Leu Trp Leu Leu Lys Arg Ile Gln Val Pro Ile
      100              105              110
Glu Asp Ile Leu Pro Ser Lys Glu Glu Lys Ser Lys Thr Pro Pro Met
      115              120              125
Phe Leu Cys Ile Lys Val Gly Lys Pro Met Arg Lys Ser Phe Ala Thr
      130              135              140
His Thr Ala Ala Met Val Gln Gln Tyr Gly Lys Arg Arg Lys Gln Pro
145              150              155              160
Glu Tyr Trp Phe Ala Val Pro Arg Glu Arg Val Asp His Leu Tyr Thr
      165              170              175
Phe Phe Val Gln Trp Ser Pro Asp Val Tyr Gly Lys Asp Ala Lys Glu
      180              185              190
Gln Gly Phe Val Val Val Glu Lys Glu Glu Leu Asn Met Ile Asp Asn
      195              200              205
Phe Phe Ser Glu Pro Thr Thr Lys Ser Trp Glu Ile Ile Thr Val Glu
      210              215              220
Glu Ala Lys Arg Arg Lys Ser Thr Cys Ser Tyr Tyr Glu Asp Glu Asp
225              230              235              240
Glu Glu Val Leu Pro Val Leu Arg Pro Pro Arg Ala Phe Trp Glu Asn
      245              250              255
Lys Pro Leu Asn Arg Trp Ala Arg Pro Phe Pro Ala Arg Val Gln Gly
      260              265              270
Tyr Pro Trp Arg Leu Ala Tyr Ser Thr Leu Glu His Gly Thr Ser Leu
      275              280              285
Lys Thr Leu Tyr Arg Lys Ser Ala Ser Leu Asp Ser Pro Val Leu Leu
      290              295              300
Val Ile Lys
305

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&lt;210&gt; 2763

&lt;211&gt; 2210

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2763

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120
caaacagtcc agtccctgcag accacacagg gtacatctag agggttctac ttgcatcacc
180
cacacttcca ctctgtgaa acaactgtct tgggcatgag aagggccagg ataggccagg
240
tgaatggcag gctgccaac aacccaatc ccaaaccaac ctcccaggcc atgggccaac
300
gtccctgcag gaagatgcta ataggtaaa caggtagaac atgtagacac aaacatctag
360
tttatttttt ctgactgtaa ccaaagtcag caaaagaaac aacaaaactt cagtgcctta
420

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gaaatcctcc tggattcaat gacaacacat caatggccgg gcacaggggtt ggattccttt  
480  
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540  
tctttaatag ctacaccaca ttttctcacc ctttaagtta tgacagacag gttatctctc  
600  
tccaagagca tcagggttaga tgctctttca ctcttacaaa ctgtcagggtg gagggagaat  
660  
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720  
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1260  
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1740  
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1920  
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1980  
cttcaactgc aatatccatc ctgtcgggtt tttcctctc actctctacc tctgcttta  
2040



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<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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Gly	Val	Ile	Asp	Pro	Gly	Met	Glu	Tyr	Val	Pro	Pro	Pro	Ala	Gly	Ser
			20					25					30		
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
		35					40					45			
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
	50					55					60				
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
65					70					75				80	
Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
			85						90					95	
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
		100					105						110		
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
		115					120					125			
Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
	130					135					140				
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
145					150					155				160	
Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
			165					170						175	
Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
		180						185					190		
Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
	195						200					205			
His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
	210					215					220				
Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
225					230					235				240	
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
			245						250					255	
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
		260						265					270		
Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
	275						280					285			
Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
	290					295					300				
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
305					310					315				320	
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys

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          325          330          335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
          340          345          350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
          355          360          365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
          370          375          380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
385          390          395          400
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
          405          410          415
Phe Phe Leu Arg Leu Arg Arg
          420

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&lt;210&gt; 2765

&lt;211&gt; 582

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2765

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360
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480
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582

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&lt;210&gt; 2766

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2766

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Met Gly Arg Trp Pro Pro Ala Val Thr Leu Thr Cys Arg Pro Thr Ala
1          5          10          15
Thr Val Pro Trp Ser Pro Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu
20          25          30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
35          40          45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

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50		55		60
Leu Ser Gly Gln Trp Trp Ser Ala Gly Ala Cys Phe Leu Asp Leu Pro				
65		70		75
Ser Leu Ala Leu Cys Trp Pro Gly Asp Ser Gly Asp Ala Glu Trp Pro				80
	85		90	95
Glu Ala Gly Ser				
100				

&lt;210&gt; 2767

&lt;211&gt; 1202

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2767

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120
gactcagcct acgacagcaa cgacctgat gtggaatcca acagcagcag tggcatcagc
180
tctcccagca ggcagcccca ggtgcccag gccacagctg ctggcttgga tagcgcgggc
240
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1200

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1202

<210> 2768  
<211> 282  
<212> PRT  
<213> Homo sapiens

<400> 2768  
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20 25 30  
Ser Leu Ala Gln Pro Asp Arg Arg Tyr Ser Glu Pro Ser Met Pro Ser  
35 40 45  
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys  
50 55 60  
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser  
65 70 75 80  
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln  
85 90 95  
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro  
100 105 110  
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser  
115 120 125  
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser  
130 135 140  
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr  
145 150 155 160  
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe  
165 170 175  
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly  
180 185 190  
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val  
195 200 205  
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys  
210 215 220  
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala  
225 230 235 240  
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly  
245 250 255  
Ser Pro Pro Ser Tyr Glu Glu Ala Met Gln Gly Pro Ala Ala Arg Leu  
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Val Ala Ser Gln Gln Phe Gln Phe Leu Ala  
275 280

<210> 2769  
<211> 1286  
<212> DNA  
<213> Homo sapiens

<400> 2769  
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 1286

&lt;210&gt; 2770

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2770

Ile	Cys	Asn	Met	Tyr	Thr	Met	Tyr	Ser	Met	Met	Asn	Val	Gly	Gln	Thr
1					5				10					15	
Ala	Glu	Lys	Val	Glu	Ala	Leu	Pro	Glu	Gln	Val	Ala	Pro	Glu	Ser	Arg
			20					25					30		
Asn	Arg	Ile	Arg	Val	Arg	Gln	Asp	Leu	Ala	Ser	Leu	Pro	Ala	Glu	Leu

	35		40		45	
Ile	Asn	Gln	Ile	Gly	Asn	Arg
50					55	
Asp	Pro	Ser	Glu	Lys	Leu	Glu
65					70	
Thr	Arg	Ala	Gln	Leu	Met	Asn
					85	
Lys	Val	Leu	Leu	Arg	Arg	Leu
					100	
Leu	Ala	Asn	Ser	Cys	Gly	Thr
					115	
Arg	Arg	Lys	Pro	Leu	Asp	Ser
					130	
Cys	Gln	Asn	Phe	Ala	Pro	Asn
145					150	
Ala	Ala	Asp	Met	Cys	Thr	Asn
					165	
Met	Pro	Lys	Val	Lys	Val	Leu
					180	
Phe	Ile	Ser	Glu	Thr	Gly	Lys
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&lt;210&gt; 2771

&lt;211&gt; 1668

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2771

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&lt;210&gt; 2772

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2772

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Thr	Thr	Leu	Gly	Thr	Leu	Arg	Lys	Phe	Pro	Gly	Ser	Lys	Leu	Ala	Glu
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Phe	Ile	Asp	Arg	Pro	Ser	Thr	Tyr	Phe	Arg	Pro	Ile	Leu	Asp	Tyr	Leu
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Arg	Thr	Gly	Gln	Val	Pro	Thr	Gln	His	Ile	Pro	Glu	Val	Tyr	Arg	Glu

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Val Pro Gly Tyr Ser Glu Asn Leu Glu Leu Met Val Arg Leu Ala Arg		
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Ala Glu Ala Ile Thr Ala Arg Lys Ser Ser Val Leu Val Cys Leu Val		
165	170	175
Glu Thr Glu Glu Gln Asp Ala Tyr Tyr Ser Glu Val Leu Cys Phe Leu		
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Gln Asp Lys Lys Met Phe Lys Ser Val Val Lys Phe Gly Pro Trp Lys		
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Ala Val Leu Asp Asn Ser Asp Leu Met His Cys Leu Glu Met Asp Ile		
210	215	220
Lys Ala Gln Gly Tyr Lys Val Phe Ser Lys Phe Tyr Leu Thr Tyr Pro		
225	230	235
Thr Lys Arg Asn Glu Phe His Phe Asn Ile Tyr Ser Phe Thr Phe Thr		
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Trp Trp		

&lt;210&gt; 2773

&lt;211&gt; 593

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2773

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&lt;210&gt; 2774

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2774

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 35 40 45  
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&lt;211&gt; 3139

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2775

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7080



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8460  
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8625

&lt;210&gt; 2778

&lt;211&gt; 1146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2778

Thr Ala Ser Gly Gln Gly Ser Val Lys Tyr Asp Ser Thr Asp Gln Gly  
 1 5 10 15  
 Ser Pro Ala Ser Thr Pro Ser Thr Thr Arg Pro Leu Asn Ser Val Glu  
 20 25 30  
 Pro Ala Thr Met Gln Pro Ile Pro Glu Ala His Ser Leu Tyr Val Thr  
 35 40 45  
 Leu Ile Leu Ser Asp Ser Val Met Asn Ile Phe Lys Asp Arg Asn Phe  
 50 55 60  
 Asp Ser Cys Cys Ile Cys Ala Cys Asn Met Asn Ile Lys Gly Ala Asp  
 65 70 75 80  
 Val Gly Leu Tyr Ile Pro Asp Ser Ser Asn Glu Asp Gln Tyr Arg Cys  
 85 90 95  
 Thr Cys Gly Phe Ser Ala Ile Met Asn Arg Lys Leu Gly Tyr Asn Ser  
 100 105 110  
 Gly Leu Phe Leu Glu Asp Glu Leu Asp Ile Phe Gly Lys Asn Ser Asp  
 115 120 125  
 Ile Gly Gln Ala Ala Glu Arg Arg Leu Met Met Cys Gln Ser Thr Phe  
 130 135 140  
 Leu Pro Gln Val Glu Gly Thr Lys Lys Pro Gln Glu Pro Pro Ile Ser  
 145 150 155 160  
 Leu Leu Leu Leu Leu Gln Asn Gln His Thr Gln Pro Phe Ala Ser Leu  
 165 170 175  
 Asn Phe Leu Asp Tyr Ile Ser Ser Asn Asn Arg Gln Thr Leu Pro Cys  
 180 185 190  
 Val Ser Trp Ser Tyr Asp Arg Val Gln Ala Asp Asn Asn Asp Tyr Trp  
 195 200 205  
 Thr Glu Cys Phe Asn Ala Leu Glu Gln Gly Arg Gln Tyr Val Asp Asn  
 210 215 220  
 Pro Thr Gly Gly Lys Val Asp Glu Ala Leu Val Arg Ser Ala Thr Val  
 225 230 235 240  
 His Ser Trp Pro His Ser Asn Val Leu Asp Ile Ser Met Leu Ser Ser  
 245 250 255  
 Gln Asp Val Val Arg Met Leu Leu Ser Leu Gln Pro Phe Leu Gln Asp  
 260 265 270  
 Ala Ile Gln Lys Lys Arg Thr Gly Arg Thr Trp Glu Asn Ile Gln His  
 275 280 285  
 Val Gln Gly Pro Leu Thr Trp Gln Gln Phe His Lys Met Ala Gly Arg  
 290 295 300  
 Gly Thr Tyr Gly Ser Glu Glu Ser Pro Glu Pro Leu Pro Ile Pro Thr  
 305 310 315 320  
 Leu Leu Val Gly Tyr Asp Lys Asp Phe Leu Thr Ile Ser Pro Phe Ser  
 325 330 335  
 Leu Pro Phe Trp Glu Arg Leu Leu Leu Asp Pro Tyr Gly Gly His Arg  
 340 345 350  
 Asp Val Ala Tyr Ile Val Val Cys Pro Glu Asn Glu Ala Leu Leu Glu  
 355 360 365  
 Gly Ala Lys Thr Phe Phe Arg Asp Leu Ser Ala Val Tyr Glu Met Cys  
 370 375 380  
 Arg Leu Gly Gln His Lys Pro Ile Cys Lys Val Leu Arg Asp Gly Ile

385		390		395		400
Met Arg Val Gly	Lys Thr Val Ala Gln Lys	Leu Thr Asp Glu	Leu Val			
	405	410	415			
Ser Glu Trp Phe	Asn Gln Pro Trp Ser Gly Glu	Glu Asn Asp Asn His				
	420	425	430			
Ser Arg Leu Lys	Leu Tyr Ala Gln Val Cys Arg His	His Leu Ala Pro				
	435	440	445			
Tyr Leu Ala Thr	Leu Gln Leu Asp Ser Ser Leu	Leu Ile Pro Pro Lys				
	450	455	460			
Tyr Gln Thr Pro	Pro Ala Ala Gln Gly Gln Ala Thr	Pro Gly Asn				
465	470	475	480			
Ala Gly Pro Leu	Ala Pro Asn Gly Ser Ala Ala	Pro Pro Ala Gly Ser				
	485	490	495			
Ala Phe Asn Pro	Thr Ser Asn Ser Ser Ser Thr	Asn Pro Ala Ala Ser				
	500	505	510			
Ser Ser Ala Ser	Gly Ser Ser Val Pro Pro Val	Ser Ser Ser Ala Ser				
	515	520	525			
Ala Pro Gly Ile	Ser Gln Ile Ser Thr Thr Ser	Ser Ser Gly Phe Ser				
	530	535	540			
Gly Ser Val Gly	Gly Gln Asn Pro Ser Thr Gly	Gly Ile Ser Ala Asp				
545	550	555	560			
Arg Thr Gln Arg	Asn Ile Gly Cys Gly Gly Asp	Thr Asp Pro Gly Gln				
	565	570	575			
Ser Ser Ser Gln	Pro Ser Gln Asp Gly Gln Glu	Ser Val Thr Glu Arg				
	580	585	590			
Glu Arg Ile Gly	Ile Pro Thr Glu Pro Asp Ser	Ala Asp Ser His Ala				
	595	600	605			
His Pro Pro Ala	Val Val Ile Tyr Met Val Asp	Pro Phe Thr Tyr Ala				
	610	615	620			
Ala Glu Glu Asp	Ser Thr Ser Gly Asn Phe Trp	Leu Leu Ser Leu Met				
625	630	635	640			
Arg Cys Tyr Thr	Glu Met Leu Asp Asn Leu Pro	Glu His Met Arg Asn				
	645	650	655			
Ser Phe Ile Leu	Gln Ile Val Pro Cys Gln Tyr	Met Leu Gln Thr Met				
	660	665	670			
Lys Asp Glu Gln	Val Phe Tyr Ile Gln Tyr Leu	Lys Ser Met Ala Phe				
	675	680	685			
Ser Val Tyr Cys	Gln Cys Arg Arg Pro Leu Pro	Thr Gln Ile His Ile				
	690	695	700			
Lys Ser Leu Thr	Gly Phe Gly Pro Ala Ala Ser	Ile Glu Met Thr Leu				
705	710	715	720			
Lys Asn Pro Glu	Arg Pro Ser Pro Ile Gln Leu	Tyr Ser Pro Pro Phe				
	725	730	735			
Ile Leu Ala Pro	Ile Lys Asp Lys Gln Thr Glu	Leu Gly Glu Thr Phe				
	740	745	750			
Gly Glu Ala Ser	Gln Lys Tyr Asn Val Leu Phe	Val Gly Tyr Cys Leu				
	755	760	765			
Ser His Asp Gln	Arg Trp Leu Leu Ala Ser Cys	Thr Asp Leu His Gly				
	770	775	780			
Glu Leu Leu Glu	Thr Cys Val Val Asn Ile Ala	Leu Pro Asn Arg Ser				
785	790	795	800			
Arg Arg Ser Lys	Val Ser Ala Arg Lys Ile Gly	Leu Gln Lys Leu Trp				
	805	810	815			
Glu Trp Cys Ile	Gly Ile Val Gln Met Thr Ser	Leu Pro Trp Arg Val				

820 825 830  
 Val Ile Gly Arg Leu Gly Arg Leu Gly His Gly Glu Leu Lys Asp Trp  
 835 840 845  
 Ser Ile Leu Leu Gly Glu Cys Ser Leu Gln Thr Ile Ser Lys Lys Leu  
 850 855 860  
 Lys Asp Val Cys Arg Met Cys Gly Ile Ser Ala Ala Asp Ser Pro Ser  
 865 870 875 880  
 Ile Leu Ser Ala Cys Leu Val Ala Met Glu Pro Gln Gly Ser Phe Val  
 885 890 895  
 Val Met Pro Asp Ala Val Thr Met Gly Ser Val Phe Gly Arg Ser Thr  
 900 905 910  
 Ala Leu Asn Met Gln Ser Ser Gln Leu Asn Thr Pro Gln Asp Ala Ser  
 915 920 925  
 Cys Thr His Ile Leu Val Phe Pro Thr Ser Ser Thr Ile Gln Val Ala  
 930 935 940  
 Pro Ala Asn Tyr Pro Asn Glu Asp Gly Phe Ser Pro Asn Asn Asp Asp  
 945 950 955 960  
 Met Phe Val Asp Leu Pro Phe Pro Asp Asp Met Asp Asn Asp Ile Gly  
 965 970 975  
 Ile Leu Met Thr Gly Asn Leu His Ser Ser Pro Asn Ser Ser Pro Val  
 980 985 990  
 Pro Ser Pro Gly Ser Pro Ser Gly Ile Gly Val Gly Ser His Phe Gln  
 995 1000 1005  
 His Ser Arg Ser Gln Gly Glu Arg Leu Leu Ser Arg Glu Ala Pro Glu  
 1010 1015 1020  
 Glu Leu Lys Gln Gln Pro Leu Ala Leu Gly Tyr Phe Val Ser Thr Ala  
 1025 1030 1035 1040  
 Lys Ala Glu Asn Leu Pro Gln Trp Phe Trp Ser Ser Cys Pro Gln Ala  
 1045 1050 1055  
 Gln Asn Gln Cys Pro Leu Phe Leu Lys Ala Ser Leu His His His Ile  
 1060 1065 1070  
 Ser Val Ala Gln Thr Asp Glu Leu Leu Pro Ala Arg Asn Ser Gln Arg  
 1075 1080 1085  
 Val Pro His Pro Leu Asp Ser Lys Thr Thr Ser Asp Val Leu Arg Phe  
 1090 1095 1100  
 Val Leu Glu Gln Tyr Asn Ala Leu Ser Trp Leu Thr Cys Asn Pro Ala  
 1105 1110 1115 1120  
 Thr Gln Asp Arg Thr Ser Cys Leu Pro Val His Phe Val Val Leu Thr  
 1125 1130 1135  
 Gln Leu Tyr Asn Ala Ile Met Asn Ile Leu  
 1140 1145

&lt;210&gt; 2779

&lt;211&gt; 2461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2779

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 180

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 2460  
 a  
 2461

&lt;210&gt; 2780

&lt;211&gt; 720

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2780

Met	His	Ser	Glu	Gln	Glu	Gly	Gln	His	Val	Gln	Arg	Pro	Cys	Gly	Gly
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Lys	Glu	Phe	Gly	Leu	Phe	Glu	Glu	Leu	Ser	Glu	Gly	Ser	Phe	Gly	Trp
			20					25					30		
Val	Thr	Gly	Ile	Arg	Arg	Met	Arg	Phe	Lys	Gly	Leu	Ala	Gly	Val	Asp
		35				40					45				
Ser	Ser	Leu	Glu	Val	Val	Ser	Leu	Leu	Pro	Pro	Arg	Ser	Phe	Ser	Leu
	50					55					60				
Asn	Ser	Glu	Gly	Ala	Glu	Arg	Met	Ala	Thr	Thr	Gly	Thr	Pro	Thr	Ala
65					70					75				80	
Asp	Arg	Gly	Asp	Ala	Ala	Ala	Thr	Asp	Asp	Pro	Ala	Ala	Arg	Phe	Gln
			85					90					95		
Val	Gln	Lys	His	Ser	Trp	Asp	Gly	Leu	Arg	Ser	Ile	Ile	His	Gly	Ser
			100				105						110		
Arg	Lys	Tyr	Ser	Gly	Leu	Ile	Val	Asn	Lys	Ala	Pro	His	Asp	Phe	Gln
		115				120						125			
Phe	Val	Gln	Lys	Thr	Asp	Glu	Ser	Gly	Pro	His	Ser	His	Arg	Leu	Tyr
		130				135					140				
Tyr	Leu	Gly	Met	Pro	Tyr	Gly	Ser	Arg	Glu	Asn	Ser	Leu	Leu	Tyr	Ser
145					150					155				160	
Glu	Ile	Pro	Lys	Lys	Val	Arg	Lys	Glu	Ala	Leu	Leu	Leu	Leu	Ser	Trp
			165					170						175	
Lys	Gln	Met	Leu	Asp	His	Phe	Gln	Ala	Thr	Pro	His	His	Gly	Val	Tyr

180	185	190
Ser Arg Glu Glu Leu Leu Arg Glu Arg Lys Arg Leu Gly Val Phe		
195	200	205
Gly Ile Thr Ser Tyr Asp Phe His Ser Glu Ser Gly Leu Phe Leu Phe		
210	215	220
Gln Ala Ser Asn Ser Leu Phe His Cys Arg Asp Gly Gly Lys Asn Gly		
225	230	240
Phe Met Val Ser Pro Gly Pro Gly Cys Val Ser Pro Met Lys Pro Leu		
245	250	255
Glu Ile Lys Thr Gln Cys Ser Gly Pro Arg Met Asp Pro Lys Ile Cys		
260	265	270
Pro Ala Asp Pro Ala Phe Phe Ser Phe Ile Asn Asn Ser Asp Leu Trp		
275	280	285
Val Ala Asn Ile Glu Thr Gly Glu Glu Arg Arg Leu Thr Phe Cys His		
290	295	300
Gln Gly Leu Ser Asn Val Leu Asp Asp Pro Lys Ser Ala Gly Val Ala		
305	310	315
Thr Phe Val Ile Gln Glu Glu Phe Asp Arg Phe Thr Gly Tyr Trp Trp		
325	330	335
Cys Pro Thr Ala Ser Trp Glu Gly Ser Glu Gly Leu Lys Thr Leu Arg		
340	345	350
Ile Leu Tyr Glu Glu Val Asp Glu Ser Glu Val Glu Val Ile His Val		
355	360	365
Pro Ser Pro Ala Leu Glu Glu Arg Lys Thr Asp Ser Tyr Arg Tyr Pro		
370	375	380
Arg Thr Gly Ser Lys Asn Pro Lys Ile Ala Leu Lys Leu Ala Glu Phe		
385	390	395
Gln Thr Asp Ser Gln Gly Lys Ile Val Ser Thr Gln Glu Lys Glu Leu		
405	410	415
Val Gln Pro Phe Ser Ser Leu Phe Pro Lys Val Glu Tyr Ile Ala Arg		
420	425	430
Ala Gly Trp Thr Arg Asp Gly Lys Tyr Ala Trp Ala Met Phe Leu Asp		
435	440	445
Arg Pro Gln Gln Trp Leu Gln Leu Val Leu Leu Pro Pro Ala Leu Phe		
450	455	460
Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala Ser Ala Arg Ala		
465	470	475
Val Pro Arg Asn Val Gln Pro Tyr Val Val Tyr Glu Glu Val Thr Asn		
485	490	495
Val Trp Ile Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln Ser Glu		
500	505	510
Gly Glu Asp Glu Leu Cys Phe Leu Arg Ala Asn Glu Cys Lys Thr Gly		
515	520	525
Phe Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln Gly Tyr		
530	535	540
Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu Asp Glu Phe Lys Cys Pro		
545	550	555
Ile Lys Glu Glu Ile Ala Leu Thr Ser Gly Glu Trp Glu Val Leu Ala		
565	570	575
Arg His Gly Ser Lys Ile Trp Val Asn Glu Glu Thr Lys Leu Val Tyr		
580	585	590
Phe Gln Gly Thr Lys Asp Thr Pro Leu Glu His His Leu Tyr Val Val		
595	600	605
Ser Tyr Glu Ala Ala Gly Glu Ile Val Arg Leu Thr Thr Pro Gly Phe		

610		615		620
Ser His Ser Cys Ser Met Ser Gln Asn Phe Asp Met Phe Val Ser His				
625		630		635
Tyr Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser				640
	645		650	655
Gly Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser				
	660		665	670
Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile				
	675		680	685
Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr				
	690		695	700
Lys Pro His Ala Leu Gln His Ile Thr Lys Lys Ser Thr Val Phe Glu				
705		710		715
				720

&lt;210&gt; 2781

&lt;211&gt; 1268

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2781

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1020

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 1140  
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 1268

&lt;210&gt; 2782

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2782

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 Ile Gly Thr Thr Lys Lys Gly Ile Gly Pro Thr Tyr Ser Ser Lys Ala  
 20 25 30  
 Ala Arg Thr Gly Leu Arg Ile Cys Asp Leu Leu Ser Asp Phe Asp Glu  
 35 40 45  
 Phe Ser Ser Arg Phe Lys Asn Leu Ala His Gln His Gln Ser Met Phe  
 50 55 60  
 Pro Thr Leu Glu Ile Asp Ile Glu Gly Gln Leu Lys Arg Leu Lys Gly  
 65 70 75 80  
 Phe Ala Glu Arg Ile Arg Pro Met Val Arg Asp Gly Val Tyr Phe Met  
 85 90 95  
 Tyr Glu Ala Leu His Gly Pro Pro Lys Lys Ile Leu Val Glu Gly Ala  
 100 105 110  
 Asn Ala Ala Leu Leu Asp Ile Asp Phe Gly Thr Tyr Pro Phe Val Thr  
 115 120 125  
 Ser Ser Asn Cys Thr Val Gly Gly Val Cys Thr Gly Leu Gly Ile Pro  
 130 135 140  
 Pro Gln Asn Ile Gly Asp Val Tyr Gly Val Val Lys Ala Tyr Thr Thr  
 145 150 155 160  
 Arg Val Gly Ile Gly Ala Phe Pro Thr Glu Gln Ile Asn Glu Ile Gly  
 165 170 175  
 Gly Leu Leu Gln Thr Arg Gly His Glu Trp Gly Val Thr Thr Gly Arg  
 180 185 190  
 Lys Arg Arg Cys Gly Trp Leu Asp Leu Met Ile Leu Arg Tyr Ala His  
 195 200 205  
 Met Val Asn Gly Phe Thr Ala Leu Ala Leu Thr Lys Leu Asp Ile Leu  
 210 215 220  
 Asp Val Leu Gly Glu Val Lys Val Gly Val Ser Tyr Lys Leu Asn Gly  
 225 230 235 240  
 Lys Arg Ile Pro Tyr Phe Pro Ala Asn Gln Glu Met Leu Gln Lys Val  
 245 250 255  
 Glu Val Glu Tyr Glu Thr Leu Pro Gly Trp Lys Ala Asp Thr Thr Gly  
 260 265 270  
 Ala Arg Arg Trp Glu Asp Leu Pro Pro Gln Ala Gln Asn Tyr Ile Arg  
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 Phe Val Glu Asn His Val Gly Val Ala Val Lys Trp Val Gly Val Gly

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<210> 2783  
<211> 2376  
<212> DNA  
<213> Homo sapiens

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120  
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180  
aacatagact catcacagta tgaagattca ctgagagaga tgttcaccat tcatgcctac  
240  
attgccttta ccatggacaa actgatccag agcattgtca gacagctgca gcatatcgtg  
300  
agtgatgaga tctgtgtgca ggtgactgac ctttacctgg cagaaaataa taatggggcc  
360  
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480  
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1320

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 2280  
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 2376

&lt;210&gt; 2784

&lt;211&gt; 361

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2784

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Glu	Val	Leu	Gly	Ile	Lys	Arg	Asp	Lys	Ser	Asp	Ser	Pro	Ala	Ile	Gln
		20					25						30		
Leu	Arg	Leu	Lys	Glu	Pro	Met	Asp	Val	Asp	Val	Glu	Asp	Tyr	Tyr	Pro
		35				40					45				
Ala	Phe	Leu	Asp	Met	Val	Arg	Ser	Leu	Leu	Asp	Gly	Asn	Ile	Asp	Ser
	50				55					60					
Ser	Gln	Tyr	Glu	Asp	Ser	Leu	Arg	Glu	Met	Phe	Thr	Ile	His	Ala	Tyr
65				70				75					80		
Ile	Ala	Phe	Thr	Met	Asp	Lys	Leu	Ile	Gln	Ser	Ile	Val	Arg	Gln	Leu

					85						90						95
Gln	His	Ile	Val	Ser	Asp	Glu	Ile	Cys	Val	Gln	Val	Thr	Asp	Leu	Tyr		
			100					105					110				
Leu	Ala	Glu	Asn	Asn	Asn	Gly	Ala	Thr	Gly	Gly	Gln	Leu	Asn	Thr	Gln		
			115				120					125					
Asn	Ser	Arg	Ser	Leu	Leu	Glu	Ser	Thr	Tyr	Gln	Arg	Lys	Ala	Glu	Gln		
			130				135					140					
Leu	Met	Ser	Asp	Glu	Asn	Cys	Phe	Lys	Leu	Met	Phe	Ile	Gln	Ser	Gln		
145					150					155					160		
Gly	Gln	Val	Gln	Leu	Thr	Ile	Glu	Leu	Leu	Asp	Thr	Glu	Glu	Glu	Asn		
			165					170						175			
Ser	Asp	Asp	Pro	Val	Glu	Ala	Glu	Arg	Trp	Ser	Asp	Tyr	Val	Glu	Arg		
			180					185					190				
Tyr	Met	Asn	Ser	Asp	Thr	Thr	Ser	Pro	Glu	Leu	Arg	Glu	His	Leu	Ala		
			195				200					205					
Gln	Lys	Pro	Val	Phe	Leu	Pro	Arg	Asn	Leu	Arg	Arg	Ile	Arg	Lys	Cys		
			210				215					220					
Gln	Arg	Gly	Arg	Glu	Gln	Glu	Lys	Glu	Gly	Lys	Glu	Gly	Asn	Ser			
225					230				235					240			
Lys	Lys	Thr	Met	Glu	Asn	Val	Asp	Ser	Leu	Asp	Lys	Leu	Glu	Cys	Arg		
			245					250					255				
Phe	Lys	Leu	Asn	Ser	Tyr	Lys	Met	Val	Tyr	Val	Ile	Lys	Ser	Glu	Asp		
			260					265					270				
Tyr	Met	Tyr	Arg	Arg	Thr	Ala	Leu	Leu	Arg	Ala	His	Gln	Ser	His	Glu		
			275				280					285					
Arg	Val	Ser	Lys	Arg	Leu	His	Gln	Arg	Phe	Gln	Ala	Trp	Val	Asp	Lys		
			290				295					300					
Trp	Thr	Lys	Glu	His	Val	Pro	Arg	Glu	Met	Ala	Ala	Glu	Thr	Ser	Lys		
305					310					315					320		
Trp	Leu	Met	Gly	Glu	Gly	Leu	Glu	Gly	Leu	Val	Pro	Cys	Thr	Thr	Thr		
			325					330						335			
Cys	Asp	Thr	Glu	Thr	Leu	His	Phe	Val	Ser	Ile	Asn	Lys	Tyr	Arg	Val		
			340					345					350				
Lys	Tyr	Gly	Thr	Val	Phe	Lys	Ala	Pro									
			355				360										

&lt;210&gt; 2785

&lt;211&gt; 492

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2785

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360

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 acgtgagccc cg  
 492

<210> 2786  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 2786  
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 20 25 30  
 Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu  
 35 40 45  
 Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu  
 50 55 60  
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala  
 65 70 75 80  
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile  
 85 90 95  
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val  
 100 105 110  
 Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly  
 115 120 125  
 Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala  
 130 135 140  
 Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro  
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<210> 2787  
 <211> 299  
 <212> DNA  
 <213> Homo sapiens

<400> 2787  
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 acaatgcaca gacatggcag tatecttctg gtgggaggga gtcaccattt gctctgcctt  
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<210> 2788  
 <211> 95  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2788

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 20 25 30  
 Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly  
 35 40 45  
 Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln  
 50 55 60  
 Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser  
 65 70 75 80  
 Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln  
 85 90 95

&lt;210&gt; 2789

&lt;211&gt; 492

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2789

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 492

&lt;210&gt; 2790

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2790

Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg  
 1 5 10 15  
 Ser Ala Pro Gly Gly Cys Arg Gly Pro Gly Ala His Ala Pro Val Pro  
 20 25 30  
 Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ser Pro  
 35 40 45  
 Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu

50		55		60											
His	Cys	Pro	Leu	Leu	Arg	Ala	Glu	Pro	Gly	Ala	Gly	Ser	Arg	Pro	Ala
65					70					75				80	
Gly	Ser	Pro	Pro	Thr	Pro	Pro	Gly	Leu	Pro	Pro	Val	Pro	Arg	Glu	Arg
				85					90					95	
Gln	Ser	Gln	Lys	Thr	Gln	Ala	Gln	Ala	Ser	Ala	Thr	Pro	Ala	Ala	Cys
			100					105					110		
Leu	Ala	Leu	Ala	Arg	Gly	Leu	Arg	Leu	Cys	Arg	Leu	Ser	Thr	Ser	Gly
		115					120					125			
Arg	Val	Ala	Leu	Arg	Arg	Gly	Ser	Gly	Ser	Arg	Pro	Arg			
130					135						140				

&lt;210&gt; 2791

&lt;211&gt; 1271

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2791

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 ccaaatcccc atttttcttc caatcacatt taaaatttca atatgttgca ggcagtatgt  
 180  
 gtaagattat atccaaatat ttactcctgg ttgctcctct tgggcaagct gtgaatatga  
 240  
 tcaaaatatt taaagaagga agaaggtaaa gatctaaaat atgacatgaa aatacccaga  
 300  
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 840  
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 900  
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 960  
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 1020  
 attaatagca tgcggaagaa agaatggttt gcatccacat ggagagtgtg ccatttagag  
 1080

gtaacagggg gaggagaggg tgtgccatca agaggcaaca tggaggtgtt tcaaacctat  
 1140  
 gcatcttggt ataaatatat ctttgctcac atgaatttta cttgttaatt agcctggctg  
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 1271

<210> 2792

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2792

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Phe	Thr	Phe	Thr	Ile	Pro	Asp	Val	Glu	Asp	Ser	Ser	Gln	Arg	Pro	Asp
			20					25					30		
Gln	Gly	Pro	Gln	Arg	Pro	Pro	Pro	Glu	Gly	Leu	Leu	Pro	Arg	Pro	Pro
		35					40					45			
Gly	Asp	Ser	Gly	Asn	Gln	Asp	Asp	Gly	Pro	Gln	Gln	Arg	Pro	Pro	Lys
	50					55					60				
Pro	Gly	Gly	His	His	Arg	His	Pro	Pro	Pro	Pro	Pro	Phe	Gln	Asn	Gln
65					70					75				80	
Gln	Arg	Pro	Pro	Gln	Arg	Gly	His	Arg	Gln	Leu	Ser	Leu	Pro	Arg	Phe
			85						90					95	
Pro	Ser	Val	Ser	Leu	Gln	Glu	Ala	Ser	Ser	Phe	Phe	Arg	Arg	Asp	Arg
		100						105					110		
Pro	Ala	Arg	His	Pro	Gln	Glu	Gln	Pro	Leu	Trp					
		115					120								

<210> 2793

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2793

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 240  
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 300  
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 360  
 cagatcttaa gtagtgatat ttctcttttg tctgccccta ttgtaagtgc agatggaaca  
 420  
 caacagggtta ttctggtaca agttaacca ggagaagcat ttacaataag aagagaagat  
 480



ggacagtttc agtgcattac aggtcctgct caggttccaa tgatgtcccc aaatggttct  
 540  
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 600  
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 660  
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 720  
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 caccgct  
 847

&lt;210&gt; 2794

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2794

Met	Ala	Glu	His	Pro	Pro	Leu	Leu	Asp	Thr	Thr	Gln	Ile	Leu	Ser	Ser
1				5				10					15		
Asp	Ile	Ser	Leu	Leu	Ser	Ala	Pro	Ile	Val	Ser	Ala	Asp	Gly	Thr	Gln
		20						25					30		
Gln	Val	Ile	Leu	Val	Gln	Val	Asn	Pro	Gly	Glu	Ala	Phe	Thr	Ile	Arg
		35					40					45			
Arg	Glu	Asp	Gly	Gln	Phe	Gln	Cys	Ile	Thr	Gly	Pro	Ala	Gln	Val	Pro
		50				55					60				
Met	Met	Ser	Pro	Asn	Gly	Ser	Val	Pro	Pro	Ile	Tyr	Val	Pro	Pro	Gly
65				70						75				80	
Tyr	Ala	Pro	Gln	Val	Ile	Glu	Asp	Asn	Gly	Val	Arg	Arg	Val	Val	Val
			85						90					95	
Val	Pro	Gln	Ala	Pro	Glu	Phe	His	Pro	Gly	Ser	His	Thr	Val	Leu	His
		100						105					110		
Arg	Ser	Pro	His	Pro	Pro	Leu	Pro	Gly	Phe	Ile	Pro	Val	Pro	Thr	Met
		115					120					125			
Met	Pro	Pro	His	His	Val	Ile	Cys	Thr	His	Pro					
		130					135								

&lt;210&gt; 2795

&lt;211&gt; 1022

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2795

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 120  
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 180  
 atgtcaccca gcatggaaag gacatcttga gtgggcacca cccctgctc gccaccagt  
 240

gtcattgagaa ggtgctgctc cttctcgtcg ggcttgetca gagagatgtg ccaggcccca  
 300  
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 360  
 cggtagctgc ggaacacctc acagtctatg ttctctgtca tggtcagaat gatgtagttt  
 420  
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 480  
 gattgagctt cagctgctcg cccttctagg agctgctggt tgagatcttc ttgtcccaag  
 540  
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 660  
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 720  
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 780  
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 840  
 gtgactgaag gcagcagcaa gctgggcccc atgctgctct ccacctcatc aggtgagnna  
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 1022

<210> 2796  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 2796  
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 20 25 30  
 Gly Glu Glu Ala Glu Val Leu Glu Pro Arg Gly Ser Ser Ser Gly Cys  
 35 40 45  
 Ser Ala Pro Leu Gly Ala Val Val  
 50 55

<210> 2797  
 <211> 475  
 <212> DNA  
 <213> Homo sapiens

<400> 2797  
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 120

ctgaactcca tcagcgagtc cccgcatgag cgcattgcacc cctacatcga gctggcctgg  
 180  
 ggcttctcca cagtgttgg catcctactc ttcttgccg aggtggtgct gctctgctgg  
 240  
 atcaagttcc tccccgtgga tgcccgccgc cagcctggcc cccacctgg cctgggagt  
 300  
 cacacgggct ggcaggccgc cctggtgtcc accatcatca tgggtcccgt gggcctcatc  
 360  
 ttctggttct tcaccatcca cttctaccgc tccctggtgc gccacaaaac ggagcgccac  
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<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

Arg	Pro	Leu	Leu	Ile	Ala	Phe	Ser	Ala	Cys	Thr	Thr	Val	Leu	Val	Ala
1				5					10					15	
Val	His	Leu	Phe	Ala	Leu	Leu	Ile	Ser	Thr	Cys	Ile	Leu	Pro	Asn	Val
		20						25					30		
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
		35					40					45			
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50					55					60				
Val	Leu	Gly	Ile	Leu	Leu	Phe	Leu	Ala	Glu	Val	Val	Leu	Leu	Cys	Trp
65				70					75					80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
			85					90					95		
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
		100						105					110		
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
	115					120					125				
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
	130					135					140				
Glu	Glu	Leu	His	Lys	Leu	Lys	Val	Gln	Leu	Asp	Gly	His	Glu		
145					150					155					

<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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 120  
 gggcagccct tgagcttgac tctctgggg ccagttctta tcagaaaatg cctgaccagg  
 180  
 tcatgggtca tgtctccttt ttattctgc tgcattgatg ttggaggtgg cgaagacacc  
 240

ttcatggcca gcccgtaaa gctgagatc tccagggagc aggccatcgc gtcctcaag  
300  
gaccaggagc cgggggcctt catcatccgc gacagtcact ccttccgagg cgcgtacggg  
360  
ctggccatga aggtgtcttc gccacctcca accatcatgc agcagaataa aaaaggagac  
420  
atgacctatg agctggtcag gcattttctg atagagactg gcccagagg agtcaagctc  
480  
aagggtctgc ccaatgagcc aaacttcgga tcgctgtctg ccctggtcta ccagcactcc  
540  
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600  
tcgaaagata gtcccggccc tgccaactca actgcagacc tgctgaaaca aggggcagcc  
660  
tgcaatgtgc tcttcatcaa ctctgtggac atggagtcac tctctgggac acaggccatc  
720  
tctaaagcca catctgagac gttggtgca gacccacgc cagctgccac catcgttcac  
780  
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840  
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900  
atgaaaacag aggggtgtgc ccctgctaag ctcttcggct tcgtggcccg gaagcagggc  
960  
agcaccacgg acaacgctg ccacctctt gctgagcttg accccaacca gccggcctct  
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1200  
caacgtgggg agagggagat gaattgcaga ggggaggggg aaaagagaga gagagagaga  
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1320  
atggaaactg caaaaacca aagcctcca aactaaccag gtccacctaa cccccctcc  
1380  
ctcccctaag aagatggatg tctcaaaag agaaggaaca aacctcctg ggaatccaca  
1440  
ttttttgggg gaatggaaaa gctctgtctc cctaactcaa ctgctttgca aggggaaatc  
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aagctgggag aatctttttc tggccacctg tggggtagggt tgtcaaacca aacagagcca  
1560  
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1620  
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1680  
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1860

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 1920  
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 2160  
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 2460  
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 2700  
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 2760  
 aataggtaaa ttgacaagaa gtattttattg tttttccata ttgctttatt gccttccttg  
 2820  
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 2872

&lt;210&gt; 2800

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2800

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Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
			20					25					30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
		35					40					45			
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50				55				60						
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70					75					80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
			85				90						95		
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

	100		105		110										
Val	Tyr	Gln	His	Ser	Ile	Ile	Pro	Leu	Ala	Leu	Pro	Cys	Lys	Leu	Val
	115					120					125				
Ile	Pro	Asn	Arg	Asp	Pro	Thr	Asp	Glu	Ser	Lys	Asp	Ser	Ser	Gly	Pro
	130					135					140				
Ala	Asn	Ser	Thr	Ala	Asp	Leu	Leu	Lys	Gln	Gly	Ala	Ala	Cys	Asn	Val
145					150					155				160	
Leu	Phe	Ile	Asn	Ser	Val	Asp	Met	Glu	Ser	Leu	Thr	Gly	Pro	Gln	Ala
			165					170					175		
Ile	Ser	Lys	Ala	Thr	Ser	Glu	Thr	Leu	Ala	Ala	Asp	Pro	Thr	Pro	Ala
	180						185					190			
Ala	Thr	Ile	Val	His	Phe	Lys	Val	Ser	Ala	Gln	Gly	Ile	Thr	Leu	Thr
	195						200					205			
Asp	Asn	Gln	Arg	Lys	Leu	Phe	Phe	Arg	Arg	His	Tyr	Pro	Leu	Asn	Thr
	210					215						220			
Val	Thr	Phe	Cys	Asp	Leu	Asp	Pro	Gln	Glu	Arg	Lys	Trp	Met	Lys	Thr
225					230					235				240	
Glu	Gly	Gly	Ala	Pro	Ala	Lys	Leu	Phe	Gly	Phe	Val	Ala	Arg	Lys	Gln
			245						250				255		
Gly	Ser	Thr	Thr	Asp	Asn	Ala	Cys	His	Leu	Phe	Ala	Glu	Leu	Asp	Pro
		260					265					270			
Asn	Gln	Pro	Ala	Ser	Ala	Ile	Val	Asn	Phe	Val	Ser	Lys	Val	Met	Leu
	275					280						285			
Asn	Ala	Gly	Gln	Lys	Arg										
	290														

&lt;210&gt; 2801

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2801

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cagggggccc gggccgctgc gtgttgcca cccaagatgg agttcctcct gggaacccg  
120

ttcagcacac cagtggggca gtgcctcgaa aaggcaacag atggctcctt gcaaagtga  
180

gattggacgt tgaatatgga gatctgtgac atcatcaatg agacggagga agggccaaag  
240

gatgccattc gagccctgaa gaagcggctc aacgggaacc ggaactacag agaggtgatg  
300

ctggcattaa cagtgtctga gacatgtgtg aagaactgtg gccaccgctt ccacatcctt  
360

gtggccaacc gagatttcat cgacagtgtt ctgggtcaaaa ttatatctcc caagaacaac  
420

cctcccacca ttgtacagga caaagtgtt gctctgatcc aggcattggc tgatgccttt  
480

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540

gttgaattc  
549

&lt;210&gt; 2802

<211> 151  
 <212> PRT  
 <213> Homo sapiens

<400> 2802  
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 Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu  
 20 25 30  
 Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys  
 35 40 45  
 Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr  
 50 55 60  
 Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn  
 65 70 75 80  
 Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp  
 85 90 95  
 Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile  
 100 105 110  
 Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe  
 115 120 125  
 Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu  
 130 135 140  
 Lys Arg Lys Gly Val Glu Phe  
 145 150

<210> 2803  
 <211> 459  
 <212> DNA  
 <213> Homo sapiens

<400> 2803  
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 180  
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 300  
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 459

<210> 2804  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2804

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Gly Arg His Arg Trp Pro Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro
          20           25           30
Val Arg Gly Met Thr Asp Ser Pro Pro Pro Ala Val Gly Cys Val Leu
          35           40           45
Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
          50           55           60
Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
65           70           75           80
Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln
          85           90           95
Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
          100          105          110
Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
          115          120          125
Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
          130          135          140
Ala Gln Pro Gly Leu Ala Gly Thr Gly
145          150

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&lt;210&gt; 2805

&lt;211&gt; 771

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2805

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aagttaatac agacctgctc acacttcaga atagagaaga ttgagaggat ccagaatcca
120
gatctctgga atagctacca ggcaaagaaa aaaactatgg atgccaagaa tggccagaca
180
atgaatgaga agcaactctt ccatgggaca gatgccggct ccgtgccaca cgtcaatcga
240
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360
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420
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480
gataatgtgc accatccaag tttatttgtg gcattttatg actaccaagc ataccagag
540
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660
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771

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<210> 2806  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 2806

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Thr Val Ala Ser Lys Phe Asn Gln Thr Cys Ser His Phe Arg Ile Glu
 20           25           30
Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala
 35           40           45
Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys
 50           55           60
Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg
 65           70           75           80
Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly
 85           90           95
Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr
 100          105          110
Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg
 115          120          125
Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro
 130          135          140
Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr
 145          150          155          160
Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln
 165          170          175
Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
 180          185

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<210> 2807  
 <211> 1660  
 <212> DNA  
 <213> Homo sapiens

<400> 2807

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 1660

&lt;210&gt; 2808

&lt;211&gt; 390

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2808

Met	Leu	Phe	Glu	Lys	Asp	Gly	Ser	Ser	Cys	Ile	Ser	Arg	Arg	Pro	Leu
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Glu	Leu	Ala	Gly	Cys	Ala	Ser	Cys	Leu	Thr	Val	Gln	Asp	Asn	Trp	Thr
		20						25				30			
Leu	Glu	Leu	Glu	Ser	Ser	Gln	Asp	Ile	Gln	Asp	Val	Leu	Asp	Ala	Asn
		35					40				45				
Lys	Ser	Leu	Pro	Glu	Ser	Ser	Leu	Thr	Asp	Leu	Leu	Ser	Asp	Asn	Phe

50	55	60
Thr Asp Ser Leu Val Ser Phe Ser Ala Glu Ile Leu Ser Arg Thr Leu		
65	70	75
Cys Glu Pro Leu Val Ala Ser Leu Trp Met Lys Leu Gly Asn Thr Gly		80
	85	90
Ala Met Arg Arg Cys Val Lys Leu Thr Val Ala Leu Glu Thr Ala Glu		95
	100	105
Cys Glu Phe Pro Pro His Leu Asp Val Tyr Ile Glu Asp Pro His Leu		110
	115	120
Pro Pro Ser Leu Gly Leu Leu Pro Gly Ala Arg Val His Phe Ser Gln		125
	130	135
Leu Glu Lys Arg Val Ser Arg Ser His Asn Val Tyr Cys Cys Phe Arg		140
	145	150
Ser Ser Thr Tyr Val Gln Val Leu Ser Phe Pro Pro Glu Thr Thr Ile		155
	155	160
Ser Val Pro Leu Pro His Ile Tyr Leu Ala Glu Leu Leu Gln Gly Gly		165
	165	170
Gln Ser Pro Phe Gln Ala Thr Ala Ser Cys His Ile Val Ser Val Phe		175
	180	185
Ser Leu Gln Leu Phe Trp Val Cys Ala Tyr Cys Thr Ser Ile Cys Arg		190
	195	200
Gln Gly Lys Cys Thr Arg Leu Gly Ser Thr Cys Pro Thr Gln Thr Ala		205
	210	215
Ile Ser Gln Ala Ile Ile Arg Leu Leu Val Glu Asp Gly Thr Ala Glu		220
	225	230
Ala Val Val Thr Cys Arg Asn His His Val Ala Ala Ala Leu Gly Leu		235
	245	250
Cys Pro Arg Glu Trp Ala Ser Leu Leu Asp Phe Val Gln Val Pro Gly		255
	260	265
Arg Val Val Leu Gln Phe Ala Gly Pro Gly Ala Gln Leu Glu Ser Ser		270
	275	280
Ala Arg Val Asp Glu Pro Met Thr Met Phe Leu Trp Thr Leu Cys Thr		285
	290	295
Ser Pro Ser Val Leu Arg Pro Ile Val Leu Ser Phe Glu Leu Glu Arg		300
	305	310
Lys Pro Ser Lys Ile Val Pro Leu Glu Pro Pro Arg Leu Gln Arg Phe		315
	325	330
Gln Cys Gly Glu Leu Pro Phe Leu Thr His Val Asn Pro Arg Leu Arg		335
	340	345
Leu Ser Cys Leu Ser Ile Arg Glu Ser Glu Tyr Ser Ser Ser Leu Gly		350
	355	360
Ile Leu Ala Ser Ser Cys		365
	370	375
	380	
	385	
	390	

&lt;210&gt; 2809

&lt;211&gt; 1502

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2809

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120

actgttaagc gctggcccag tccccccacc ccaccagcc gtgtactgcc tgggtccccc  
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tgttttgttt tctgagccc tcaactctgt tttgtgtgtg tactcggtag agtcaagact  
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1440  
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1500  
aa  
1502

&lt;210&gt; 2810

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2810

Glu Cys Ala Cys Ala Arg Val Cys Val Cys Val Arg Leu Cys Val Arg  
 1 5 10 15  
 Val Cys Val Cys Ala Arg Leu Cys Val Cys Val Cys Ala Ser Val Cys  
 20 25 30  
 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys  
 35 40 45  
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys  
 50 55 60  
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys  
 65 70 75 80  
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly  
 85 90 95  
 Phe Gly Thr Arg Trp Phe  
 100

&lt;210&gt; 2811

&lt;211&gt; 591

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2811

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 caaaggagac cataaagtgt aggatatttc ctggttagtg gctgccgggt aatcacgatg  
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 360  
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 591

&lt;210&gt; 2812

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2812

Met His Pro Ser Ser Ser Ala Ser Gln Pro Ser Val Ala Arg Arg Gln  
 1 5 10 15  
 Ser Pro Ser Leu Gly Gly Lys Ser Pro Glu Pro Ser Leu Pro Xaa Cys  
 20 25 30  
 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

35	40	45
Gly Pro Arg Val Pro Gly Pro Pro Arg Pro Trp Gly Ala Ala Pro Leu		
50	55	60
Arg Pro Arg Pro Gly Glu Gly Asp Pro Val Thr Arg Glu Arg Ser Pro		
65	70	75
Val Pro Gly Ala Thr Glu Met Pro Pro Pro Arg Pro Lys Val Pro Ala		
85	90	95
Pro Pro Gly Pro Thr Gly Arg Ser Pro Arg Ala Ala Val Gly His His		
100	105	110
Arg Ala Ala Gly Pro Pro Gly Cys Val Gly Pro Ser Leu Ser Gly Gln		
115	120	125
Leu Gly Ser		
130		

&lt;210&gt; 2813

&lt;211&gt; 2417

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2813

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120
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180
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1020

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&lt;210&gt; 2814

&lt;211&gt; 471

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2814

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 Gly Glu Asp Ile Pro Asp Phe Ser Ser Leu Lys Glu Glu Thr Ala Tyr  
 20 25 30  
 Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Ser Phe Gln Glu Ala Arg  
 35 40 45  
 Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu  
 50 55 60  
 Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln  
 65 70 75 80  
 Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys  
 85 90 95  
 Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu  
 100 105 110  
 Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr  
 115 120 125  
 Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg  
 130 135 140  
 Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile  
 145 150 155 160  
 Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu  
 165 170 175  
 Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln  
 180 185 190  
 Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala  
 195 200 205  
 Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln  
 210 215 220  
 Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn  
 225 230 235 240  
 Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro  
 245 250 255  
 Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu  
 260 265 270  
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 275 280 285  
 Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val  
 290 295 300  
 Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly  
 305 310 315 320  
 His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala  
 325 330 335  
 Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly  
 340 345 350  
 Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala  
 355 360 365  
 Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly  
 370 375 380  
 Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala  
 385 390 395 400  
 Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser  
 405 410 415  
 Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu



	420		425		430										
Val	Ser	His	Asp	Cys	Thr	Phe	Val	Gly	Arg	Lys	Val	Ile	His	Thr	Cys
	435						440					445			
Ile	Thr	Trp	Ser	Leu	Asp	Ala	Glu	Val	Pro	Ile	His	His	Thr	Cys	Pro
	450						455					460			
Ile	Ala	Pro	Thr	Leu	Leu	Tyr									
465							470								

&lt;210&gt; 2815

&lt;211&gt; 1421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2815

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 1421

<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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			20					25					30		
Val	Arg	Ala	His	Gly	Asp	Pro	Val	Ser	Glu	Ser	Phe	Val	Gln	Arg	Val
		35					40					45			
Tyr	Gln	Pro	Phe	Leu	Thr	Thr	Cys	Asp	Gly	His	Arg	Ala	Cys	Ser	Thr
	50					55				60					
Tyr	Arg	Thr	Ile	Tyr	Arg	Thr	Ala	Tyr	Arg	Arg	Ser	Pro	Gly	Leu	Ala
65					70				75					80	
Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
			85					90					95		
Gly	Leu	Pro	Gly	Ala	Cys	Gly	Ala	Ala	Ile	Cys	Gln	Pro	Pro	Cys	Arg
		100					105					110			
Asn	Gly	Gly	Ser	Cys	Val	Gln	Pro	Gly	Arg	Cys	Arg	Cys	Pro	Ala	Gly
		115				120					125				
Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
	130					135				140					
Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
145					150				155					160	
Cys	Gln	Cys	Trp	Glu	Gly	His	Ser	Leu	Ser	Ala	Asp	Gly	Thr	Leu	Cys
			165				170					175			
Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
		180					185					190			
Asp	Ser	Ala	Met	Lys	Glu	Glu	Val	Gln	Arg	Leu	Gln	Ser	Arg	Val	Asp
		195				200					205				
Leu	Leu	Glu	Glu	Lys	Leu	Gln	Leu	Val	Leu	Ala	Pro	Leu	His	Ser	Leu
	210					215				220					
Ala	Ser	Gln	Ala	Gly	Ala	Trp	Ala	Pro	Gly	Pro	Arg	Gln	Pro	Pro	Gly
225			230						235					240	
Ala	Leu	Leu	Pro	Ala	Ala	Arg	Pro	His	Arg	Leu	Pro	Glu	Arg	Ala	Asp
			245					250					255		
Phe	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Val	Leu	Leu	Leu	Gln	Glu	Arg	Leu
		260					265					270			
Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
	275					280					285				
Ala	Ala	Pro	Met	Pro	Leu	Pro	Asn	Met	Leu	Gly	Val	Gln	Lys	Pro	Pro
	290					295					300				
Arg	Gly	Asp													

305

&lt;210&gt; 2817

&lt;211&gt; 219

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2817

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120  
gttctgctgc gggcggagtt ccatcagcac cagcacacac accagcacac gcaccaacac  
180  
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219

&lt;210&gt; 2818

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2818

Xaa	Gly	Phe	Ser	Val	Ser	Leu	Ser	Phe	Phe	Leu	Val	Asp	His	Glu	Leu
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Leu	Arg	Gln	Glu	Leu	Asn	Thr	Arg	Phe	Leu	Val	Gln	Ser	Ala	Glu	Arg
		20						25					30		
Pro	Gly	Ala	Ser	Leu	Gly	Pro	Gly	Val	Leu	Leu	Arg	Ala	Glu	Phe	His
		35					40				45				
Gln	His	Gln	His	Thr	His	Gln	His	Thr	His	Gln	His	Thr	His	Gln	His
	50					55				60					
Gln	His	Thr	Phe	Ala	Pro	Phe	Thr	Arg							
65					70										

&lt;210&gt; 2819

&lt;211&gt; 730

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2819

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120  
ggacccaaag ggcagaaggg ctccatgggg gccctgggg agcgggtgcaa gagccactac  
180  
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240  
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300  
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360  
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420

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 480  
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 540  
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 720  
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<210> 2820

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2820

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			20					25					30		
Ser	Ala	Gly	Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser
			35				40					45			
Met	Gly	Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser
	50					55					60				
Val	Gly	Arg	Glu	Ala	His	Ala	Gln	Gln	Pro	Leu	Leu	Pro	Asp	Val	Ile
65					70					75				80	
Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	Phe	Thr
			85					90					95		
Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	Ser	Leu	Asn
			100					105					110		
Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	Ile	Met	Lys	Asn
			115				120					125			
Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	Gly	Asp	Arg	Ser	Ile
	130					135					140				
Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	Arg	Glu	Gln	Asp	Gln	Val
145					150					155				160	
Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu	Asn	Ala	Ile	Phe	Ser	Glu
			165					170					175		
Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	Tyr	Leu	Val	Lys	His	Ala
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			195												

<210> 2821

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 2821

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180  
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240  
attatcaata aattgctgga gacaaaaat gagctccaca aacatgtgga gtttgatttc  
300  
ctcatcaagg gccagtttct tcgaatgcc ttggacaaac acatggaaat ggaagacatc  
360  
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420  
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480  
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540  
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600  
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660  
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720  
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780  
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840  
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900  
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1080  
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1380  
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 1740  
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 1746

<210> 2822

<211> 424

<212> PRT

<213> Homo sapiens

<400> 2822

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Val	Asp	Asp	Val	Pro	Phe	Ser	Ile	Pro	Ala	Thr	Ser	Glu	Val	Ala	Asp
			20					25					30		
Leu	Ser	Asn	Ile	Ile	Asn	Lys	Leu	Leu	Glu	Thr	Lys	Asn	Glu	Leu	His
		35				40						45			
Lys	His	Val	Glu	Phe	Asp	Phe	Leu	Ile	Lys	Gly	Gln	Phe	Leu	Arg	Met
	50					55					60				
Pro	Leu	Asp	Lys	His	Met	Glu	Met	Glu	Asp	Ile	Ser	Ser	Glu	Glu	Val
65					70					75				80	
Val	Glu	Ile	Glu	Tyr	Val	Glu	Lys	Tyr	Thr	Ala	Pro	Gln	Pro	Glu	Gln
				85					90					95	
Cys	Met	Phe	His	Asp	Asp	Trp	Ile	Ser	Ser	Ile	Lys	Gly	Ala	Glu	Glu
			100					105					110		
Trp	Ile	Leu	Thr	Gly	Ser	Tyr	Gly	Lys	Thr	Ser	Arg	Ile	Trp	Ser	Leu
	115						120					125			
Glu	Gly	Lys	Ser	Ile	Met	Thr	Ile	Val	Gly	His	Thr	Asp	Val	Val	Lys
	130						135					140			
Asp	Val	Ala	Trp	Val	Lys	Lys	Asp	Ser	Leu	Ser	Cys	Leu	Leu	Xaa	Glu
145					150					155				160	
Cys	Phe	Tyr	Gly	Ser	Asp	Tyr	Ser	Leu	Met	Gly	Val	Glu	Cys	Arg	Glu
				165					170					175	
Lys	Gln	Ser	Glu	Ser	Pro	Thr	Leu	Leu	Xaa	Arg	Gly	His	Ala	Gly	Ser
		180					185						190		
Val	Asp	Ser	Ile	Ala	Val	Asp	Gly	Ser	Gly	Thr	Lys	Phe	Cys	Ser	Gly
	195						200					205			
Ser	Trp	Asp	Lys	Met	Leu	Lys	Ile	Trp	Ser	Thr	Val	Pro	Thr	Asp	Glu
	210					215						220			
Glu	Asp	Glu	Met	Glu	Glu	Ser	Thr	Asn	Arg	Pro	Arg	Lys	Lys	Gln	Lys
225					230					235				240	
Thr	Glu	Gln	Leu	Gly	Leu	Thr	Arg	Thr	Pro	Ile	Val	Thr	Leu	Ser	Gly
				245					250					255	
His	Met	Glu	Ala	Val	Ser	Ser	Val	Leu	Trp	Ser	Asp	Ala	Glu	Glu	Ile
			260					265					270		
Cys	Ser	Ala	Ser	Trp	Asp	His	Thr	Ile	Arg	Val	Trp	Asp	Val	Glu	Ser
	275						280					285			
Gly	Ser	Leu	Lys	Ser	Thr	Leu	Thr	Gly	Asn	Lys	Val	Phe	Asn	Cys	Ile
	290					295					300				
Ser	Tyr	Ser	Pro	Leu	Cys	Lys	Arg	Leu	Ala	Ser	Gly	Ser	Thr	Asp	Arg
305					310					315				320	
His	Ile	Arg	Leu	Trp	Asp	Pro	Arg	Thr	Lys	Asp	Gly	Ser	Leu	Val	Ser
				325					330					335	
Leu	Ser	Leu	Thr	Ser	His	Thr	Gly	Trp	Val	Thr	Ser	Val	Lys	Trp	Ser

340 345 350  
 Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val  
 355 360 365  
 Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala  
 370 375 380  
 Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu  
 385 390 395 400  
 Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser  
 405 410 415  
 Pro Thr Thr Ser His Val Gly Ala  
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&lt;210&gt; 2823

&lt;211&gt; 461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2823

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 120  
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 180  
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 240  
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 300  
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 360  
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 420  
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 461

&lt;210&gt; 2824

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2824

Met Cys Val Ser Pro Ser Ser Pro Cys Pro Arg Gly Phe Ala Trp Leu  
 1 5 10 15  
 Asp Gln Val Pro Ser Ser Ser Leu Ala Pro Gln Ser His Trp Glu Thr  
 20 25 30  
 Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Leu Pro  
 35 40 45  
 Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr  
 50 55 60  
 His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro  
 65 70 75 80  
 His

&lt;210&gt; 2825

&lt;211&gt; 1520

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2825

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120  
gatggacatg tagagggtggc acgtttgctt ttggatagtg gtgctcaagt gaacatgcct  
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1320  
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1520

<210> 2826

<211> 506

<212> PRT

<213> Homo sapiens

<400> 2826

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		20					25					30			
Thr	Ala	Leu	Met	Glu	Ala	Cys	Met	Asp	Gly	His	Val	Glu	Val	Ala	Arg
	35					40					45				
Leu	Leu	Leu	Asp	Ser	Gly	Ala	Gln	Val	Asn	Met	Pro	Ala	Asp	Ser	Phe
50				55				60							
Glu	Ser	Pro	Leu	Thr	Leu	Ala	Ala	Cys	Gly	Gly	His	Val	Glu	Leu	Ala
65				70				75					80		
Ala	Leu	Leu	Ile	Glu	Arg	Gly	Ala	Asn	Leu	Glu	Glu	Val	Asn	Asp	Glu
			85				90					95			
Gly	Tyr	Thr	Pro	Leu	Met	Glu	Ala	Ala	Arg	Glu	Gly	His	Glu	Glu	Met
		100					105					110			
Val	Ala	Leu	Leu	Ser	Thr	Arg	Ser	Xaa	Ile	Ser	Met	His	Arg	Gln	
	115					120					125				
Lys	Lys	Leu	Lys	Lys	Leu	Leu	Thr	Leu	Ala	Cys	Cys	Gly	Gly	Phe	
130					135					140					
Leu	Glu	Val	Ala	Asp	Phe	Leu	Ile	Lys	Ala	Gly	Ala	Asp	Ile	Glu	Leu
145				150				155					160		
Gly	Cys	Ser	Thr	Pro	Leu	Met	Glu	Ala	Ala	Gln	Glu	Gly	His	Leu	Glu
			165				170					175			
Leu	Val	Lys	Tyr	Leu	Leu	Ala	Ala	Gly	Ala	Asn	Val	His	Ala	Thr	Thr
		180					185					190			
Ala	Thr	Gly	Asp	Thr	Ala	Leu	Thr	Tyr	Ala	Cys	Glu	Asn	Gly	His	Thr
	195					200						205			
Asp	Val	Ala	Asp	Val	Leu	Leu	Gln	Ala	Gly	Ala	Asp	Leu	Asp	Lys	Gln
	210				215						220				
Glu	Asp	Met	Lys	Thr	Ile	Leu	Glu	Gly	Ile	Asp	Pro	Ala	Lys	His	Leu
225				230					235					240	
Glu	His	Glu	Ser	Glu	Gly	Gly	Arg	Thr	Pro	Leu	Met	Lys	Ala	Ala	Arg
			245				250						255		
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		260					265						270		
Val	Asn	Arg	Thr	Thr	Ala	Asn	Asn	Asp	His	Thr	Val	Leu	Ser	Leu	Ala
	275					280						285			
Cys	Ala	Gly	Gly	His	Leu	Ala	Val	Val	Glu	Leu	Leu	Leu	Ala	His	Gly
	290				295							300			
Ala	Asp	Pro	Thr	His	Arg	Leu	Lys	Asp	Gly	Ser	Thr	Met	Leu	Ile	Glu
305				310					315					320	
Ala	Ala	Lys	Gly	Gly	His	Thr	Ser	Val	Val	Cys	Tyr	Leu	Leu	Asp	Tyr
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Pro	Asn	Asn	Leu	Leu	Ser	Ala	Pro	Pro	Pro	Asp	Val	Thr	Gln	Leu	Thr

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Leu Tyr Pro Gly Gly Cys Gln Gln Leu Leu His Leu Cys Val Gln Gln			
	35	40	45
Pro Leu Gln Leu Leu Gln Val Glu Phe Leu Arg Leu Asn Thr His Glu			
	50	55	60
Asp Pro Gln Leu Leu Glu Ala Thr Leu Ala Gln Leu Pro Gln Asn Leu			
65	70	75	80
Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr			
	85	90	95
Leu Gly Ala Cys Leu Arg Gly Ala Leu Thr Asn Leu Pro Ala Gly Leu			
	100	105	110
Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu			
	115	120	125
Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu			
	130	135	140
Leu Leu Ser His Asn Cys Leu Ser Glu Leu Pro Glu Ala Leu Gly Ala			
145	150	155	160

&lt;210&gt; 2829

&lt;211&gt; 3648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2829

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&lt;210&gt; 2830

&lt;211&gt; 668

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2830

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Asn	Asn	Gly	Ala	Gln	Leu	Lys	Gln	Phe	Ile	Gln	Arg	His	Gly	Met	Leu
			20					25					30		
Lys	Gln	Gln	Asp	Leu	Ser	Ile	Ala	Met	Val	Val	Thr	Ser	Arg	Glu	Val
			35				40					45			
Leu	Ser	Ala	Leu	Ser	Gln	Leu	Val	Pro	Cys	Val	Gly	Cys	Arg	Arg	Ser
	50					55					60				
Val	Glu	Arg	Leu	Phe	Ser	Gln	Leu	Val	Glu	Ser	Gly	Asn	Pro	Ala	Leu

65					70					75					80
Glu	Pro	Leu	Thr	Val	Gly	Pro	Lys	Gly	Val	Leu	Ser	Val	Thr	Arg	Ser
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Cys	Met	Thr	Asp	Ala	Lys	Lys	Leu	Tyr	Thr	Leu	Phe	Tyr	Val	His	Gly
			100					105					110		
Ser	Lys	Leu	Asn	Asp	Met	Ile	Asp	Ala	Ile	Pro	Lys	Ser	Lys	Lys	Asn
		115					120					125			
Lys	Arg	Cys	Gln	Leu	His	Ser	Leu	Asp	Thr	His	Lys	Pro	Lys	Pro	Leu
	130					135					140				
Gly	Gly	Cys	Trp	Met	Asp	Val	Trp	Glu	Leu	Met	Ser	Gln	Glu	Cys	Arg
	145			150						155					160
Asp	Glu	Val	Val	Leu	Ile	Asp	Ser	Ser	Cys	Leu	Leu	Glu	Thr	Leu	Glu
			165					170						175	
Thr	Tyr	Leu	Arg	Lys	His	Arg	Phe	Cys	Thr	Asp	Cys	Lys	Asn	Lys	Val
		180					185						190		
Leu	Arg	Ala	Tyr	Asn	Ile	Leu	Ile	Gly	Glu	Leu	Asp	Cys	Ser	Lys	Glu
	195					200						205			
Lys	Gly	Tyr	Cys	Ala	Ala	Leu	Tyr	Glu	Gly	Leu	Arg	Cys	Cys	Pro	His
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Glu	Arg	His	Ile	His	Val	Cys	Cys	Glu	Thr	Asp	Phe	Ile	Ala	His	Leu
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Arg	His	Ala	Lys	Thr	Ile	Asp	Ile	Ala	Gln	Glu	Glu	Val	Leu	Thr	Cys
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Leu	Gly	Ile	His	Leu	Tyr	Glu	Arg	Leu	His	Arg	Ile	Trp	Gln	Lys	Leu
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Arg	Ala	Glu	Glu	Gln	Thr	Trp	Gln	Met	Leu	Phe	Tyr	Leu	Gly	Val	Asp
	290					295					300				
Ala	Leu	Arg	Lys	Ser	Phe	Glu	Met	Thr	Val	Glu	Lys	Val	Gln	Gly	Ile
	305			310						315					320
Ser	Arg	Leu	Glu	Gln	Leu	Cys	Glu	Glu	Phe	Ser	Glu	Glu	Glu	Arg	Val
			325					330						335	
Arg	Glu	Leu	Lys	Gln	Glu	Lys	Lys	Arg	Gln	Lys	Arg	Lys	Asn	Arg	Arg
		340						345					350		
Lys	Asn	Lys	Cys	Val	Cys	Asp	Ile	Pro	Thr	Pro	Leu	Gln	Thr	Ala	Asp
	355					360						365			
Glu	Lys	Glu	Val	Ser	Gln	Glu	Lys	Glu	Thr	Asp	Phe	Ile	Glu	Asn	Ser
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Ser	Cys	Lys	Ala	Cys	Gly	Ser	Thr	Glu	Asp	Gly	Asn	Thr	Cys	Val	Glu
	385			390						395					400
Val	Ile	Val	Thr	Asn	Glu	Asn	Thr	Ser	Cys	Thr	Cys	Pro	Ser	Ser	Gly
			405					410						415	
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		420						425					430		
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	435					440						445			
Gly	Ser	Arg	Glu	Gly	Ser	Asp	Val	Ala	Cys	Thr	Glu	Gly	Ile	Cys	Asn
	450					455					460				
His	Asp	Glu	His	Gly	Asp	Asp	Ser	Cys	Val	His	His	Cys	Glu	Asp	Lys
	465			470						475					480
Glu	Asp	Asp	Gly	Asp	Ser	Cys	Val	Glu	Cys	Trp	Ala	Asn	Ser	Glu	Glu
			485					490						495	
Asn	Asp	Thr	Lys	Gly	Lys	Asn	Lys	Lys	Lys	Lys	Lys	Lys	Ser	Lys	Ile

500	505	510
Leu Lys Cys Asp Glu His Ile Gln	Lys Leu Gly Ser Cys Ile Thr Asp	
515	520	525
Pro Gly Asn Arg Glu Thr Ser Gly	Asn Thr Met His Thr Val Phe His	
530	535	540
Arg Asp Lys Thr Lys Asp Thr His	Pro Glu Ser Cys Cys Ser Ser Glu	
545	550	555
Lys Gly Gly Gln Pro Leu Pro Trp	Phe Glu His Arg Lys Asn Val Pro	
565	570	575
Gln Phe Ala Glu Pro Thr Glu Thr	Leu Phe Gly Pro Asp Ser Gly Lys	
580	585	590
Gly Ala Lys Ser Leu Val Glu Leu	Leu Asp Glu Ser Glu Cys Thr Ser	
595	600	605
Asp Glu Glu Ile Phe Ile Ser Gln	Asp Glu Ile Gln Ser Phe Met Ala	
610	615	620
Asn Asn Gln Ser Phe Tyr Ser Asn	Arg Glu Gln Tyr Arg Gln His Leu	
625	630	635
Lys Glu Lys Phe Asn Lys Tyr Cys	Arg Leu Asn Asp His Lys Arg Pro	
645	650	655
Ile Cys Ser Gly Trp Leu Thr Thr	Ala Gly Ala Asn	
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&lt;210&gt; 2831

&lt;211&gt; 3986

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2831

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&lt;210&gt; 2832

&lt;211&gt; 611

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2832

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 20          25          30
Gly Thr Arg Thr Ser Ser Gly Arg Leu Arg Arg Leu Gly Asp Ser Ser
 35          40          45
Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro
 50          55          60
Asn Ser Thr Pro Pro Arg Arg Val Gln Thr Pro Leu Leu Arg Ala Thr
 65          70          75          80
Val Ala Ser Ser Thr Gln Lys Phe Gln Asp Leu Gly Val Lys Asn Ser
 85          90          95
Glu Pro Ser Ala Arg His Val Asp Ser Leu Ser Gln Arg Ser Pro Lys
 100         105         110
Ala Ser Leu Arg Arg Val Glu Leu Ser Gly Pro Lys Ala Ala Glu Pro
 115         120         125
Val Ser Arg Arg Thr Glu Leu Ser Ile Asp Ile Ser Ser Lys Gln Val
 130         135         140
Glu Asn Ala Gly Ala Ile Gly Pro Ser Arg Phe Gly Leu Lys Arg Ala
 145         150         155         160
Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu
 165         170         175
Ile Thr Ile Val Lys Pro Gln Glu Ser Ala His Arg Arg Met Glu Pro
 180         185         190
Pro Ala Ser Lys Val Pro Glu Val Pro Thr Ala Pro Ala Thr Asp Ala
 195         200         205
Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro
 210         215         220
Thr Ala Pro Ser Pro Ala Gln Thr Leu Glu Asn Ser Glu Pro Ala Pro
 225         230         235         240
Val Ser Gln Leu Gln Ser Arg Leu Glu Pro Lys Pro Gln Pro Pro Val
 245         250         255
Ala Glu Ala Thr Pro Arg Ser Gln Glu Ala Thr Glu Ala Ala Pro Ser
 260         265         270
Cys Val Gly Asp Met Ala Asp Thr Pro Arg Asp Ala Gly Leu Lys Gln
 275         280         285
Ala Pro Ala Ser Arg Asn Glu Lys Ala Pro Val Asp Phe Gly Tyr Val
 290         295         300
Gly Ile Asp Ser Ile Leu Glu Gln Met Arg Arg Lys Ala Met Lys Gln
 305         310         315         320
Gly Phe Glu Phe Asn Ile Met Val Val Gly Gln Ser Gly Leu Gly Lys
 325         330         335
Ser Thr Leu Ile Asn Thr Leu Phe Lys Ser Lys Ile Ser Arg Lys Ser
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Val Gln Pro Thr Ser Glu Glu Arg Ile Pro Lys Thr Ile Glu Ile Lys
 355         360         365
Ser Ile Thr His Asp Ile Glu Glu Lys Gly Val Arg Met Lys Leu Thr

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385              390              395              400
Trp Gln Pro Ile Met Lys Phe Ile Asn Asp Gln Tyr Glu Lys Tyr Leu
      405              410              415
Gln Glu Glu Val Asn Ile Asn Arg Lys Lys Arg Ile Pro Asp Thr Arg
      420              425              430
Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg
      435              440              445
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile
      450              455              460
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val
      465              470              475              480
His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp
      485              490              495
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val
      500              505              510
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp
      515              520              525
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys
      530              535              540
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr
      545              550              555              560
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile
      565              570              575
Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu
      580              585              590
Gly Ser Ser Ala Met Ala Asn Gly Val Glu Glu Lys Glu Pro Glu Ala
      595              600              605
Pro Glu Met
      610

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&lt;210&gt; 2833

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2833

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420

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&lt;210&gt; 2834

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2834

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Met Leu Gly Ser Leu Val Leu Arg Arg Lys Ala Leu Ala Pro Arg Leu
 1           5           10           15
Leu Leu Arg Leu Leu Arg Ser Pro Thr Leu Arg Gly His Gly Gly Ala
           20           25           30
Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu
           35           40           45
Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser
           50           55           60
Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr
           65           70           75           80
Lys Cys Leu Ala Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu
           85           90           95
Thr Leu Pro Gly Gln Asp Ser Trp Asn Gly Val Pro Ser Arg Ala Gly
           100          105          110
Leu Gly Met Cys Ala
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&lt;210&gt; 2835

&lt;211&gt; 938

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2835

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300
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gaaaccatcg gtgtgcatgg taactctcta gcagtgtcct tcatgccggg acatggggac
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780

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 938

<210> 2836

<211> 178

<212> PRT

<213> Homo sapiens

<400> 2836

Met	Pro	Gly	His	Gly	Asp	Thr	Gly	Arg	His	Cys	Trp	His	Leu	Leu	Thr
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Pro	Glu	Ala	His	Thr	Ser	Glu	Pro	Val	Ser	Trp	Ala	Lys	Ala	Ser	Leu
			20					25					30		
Arg	Pro	Ser	Gly	Ser	His	Gly	Gln	Met	Ser	Gly	Asp	Thr	Glu	Ser	Glu
			35				40					45			
Thr	Leu	Ser	Val	Arg	Gly	Glu	Asp	Ile	Gly	Glu	Asp	Leu	Phe	Ser	Glu
			50			55				60					
Ala	Leu	Gly	Arg	Ala	Val	Gly	Gln	Trp	Ala	Gly	Ala	Lys	Leu	Leu	Asp
65					70					75				80	
His	Gly	Cys	Val	Glu	Ser	Ser	Ile	Leu	Asp	Ser	Ser	Ala	Gly	Ser	Ala
			85					90					95		
Pro	His	Tyr	Glu	Val	Phe	Val	Ala	Leu	Arg	Gly	Leu	Arg	Asn	Leu	Ser
			100					105					110		
Glu	Glu	Asn	Arg	Asp	Lys	Leu	Asp	His	Cys	Leu	Gln	Glu	Ala	Ser	Pro
		115					120					125			
Arg	Tyr	Lys	Ser	Leu	Arg	Phe	Trp	Gly	Ser	Val	Gly	Pro	Ala	Glu	Ser
		130				135					140				
Thr	Trp	Trp	Cys	Pro	Glu	Ser	Ser	Pro	Ala	Pro	Pro	Pro	Ser	Ser	Pro
145					150					155				160	
Gln	Arg	Pro	Pro	Arg	Pro	Ser	Leu	Trp	Asp	Leu	Ser	Gly	Trp	Gly	Val
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Leu Gly

<210> 2837

<211> 1250

<212> DNA

<213> Homo sapiens

<400> 2837

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 180  
 gaattccagg aggggaagccg agaatatgaa gctgaattgg agacgcagct gcaacaaatt  
 240  
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 300

atcaaggaga agtttgaagt gcagcactct gaaggctacc ggcagatctc agccttggag  
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 420  
 gagcaagcaa atgacgcctt ggaaagagcc aagcgcgcca cgatcatgtc tctcgaagac  
 480  
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 540  
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 660  
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 720  
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 780  
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 900  
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 960  
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 1020  
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 1080  
 tcacccccag cccacagcca tgtgtctttt taaattatag gattatttca gcaaacctta  
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 1250

&lt;210&gt; 2838

&lt;211&gt; 370

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2838

Xaa	Leu	Pro	Ser	Ser	Pro	Leu	Leu	Glu	His	His	Ala	Thr	Arg	Arg	Val
1				5					10					15	
Ile	Ser	Ser	Pro	Val	Phe	Thr	Met	Glu	Asp	Ser	Gly	Lys	Thr	Phe	Ser
			20					25					30		
Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
		35				40						45			
Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
	50				55						60				
Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Leu	Gln	Gln	Ile
65				70				75						80	
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
			85					90					95		
Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
			100					105					110		
Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala

115	120	125
Ile Lys Asp Gln Leu Gln Lys Tyr Ile Arg Glu Leu Glu Gln Ala Asn		
130	135	140
Asp Ala Leu Glu Arg Ala Lys Arg Ala Thr Ile Met Ser Leu Glu Asp		
145	150	155
Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu		
165	170	175
Ser Glu Leu Asp Glu Lys Glu Asn Leu Leu Glu Ser Val Gln Arg Leu		
180	185	190
Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu Leu Ala Val Gln Gln Lys		
195	200	205
Gln Glu Lys Pro Arg Thr Pro Met Pro Ser Ser Val Glu Ala Glu Arg		
210	215	220
Thr Asp Thr Ala Val Gln Ala Thr Gly Ser Val Pro Ser Thr Pro Ile		
225	230	235
Ala His Arg Gly Pro Ser Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg		
245	250	255
Arg Gly Leu Asp Asp Xaa His Arg Gly Thr Pro Leu Thr Pro Ala Ala		
260	265	270
Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu Leu Arg Lys Val Gly		
275	280	285
Ala Leu Glu Ser Lys Leu Ala Ser Cys Arg Asn Leu Val Tyr Asp Gln		
290	295	300
Ser Pro Asn Arg Thr Gly Gly Pro Ala Ser Gly Arg Ser Ser Lys Asn		
305	310	315
Arg Asp Gly Gly Glu Arg Arg Pro Ser Ser Thr Ser Val Pro Leu Gly		
325	330	335
Asp Lys Gly Ser Val Pro Ser Asn Lys Pro Leu Ala Gly Gly Glu Asn		
340	345	350
Pro Pro Ala Pro Gly Lys Arg His Ser Pro Pro Ala His Ser His Val		
355	360	365
Ser Phe		
370		

&lt;210&gt; 2839

&lt;211&gt; 606

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2839

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 120  
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 180  
 gctgtggggg agatttgcca agactatgac agtgacaaaa tgttccctgc ctttgggttt  
 240  
 ggcgccagga tacctccaga gtacacggtc tctcatgact ttgcaatcaa ctttaatgaa  
 300  
 gacaaccag aatgtgcagg aattcaagga gttgtggaag cctatcagag ctgtcttct  
 360  
 aagctccaac tctacggtcc caccaacatt gccccatca tccagaagggt tgccaagtca  
 420

gcgtcagagg aaactaacac caaagaggca tcgcaatact tcatcctgct gatcctgaca  
 480  
 gatggtgtta tcacagacat gggcgacacc cgggaggcca ttgtccatgc ctcccacctc  
 540  
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 606

<210> 2840

<211> 202

<212> PRT

<213> Homo sapiens

<400> 2840

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Ile	Met	Gly	Gly	Cys	Gln	Ile	Gln	Phe	Thr	Val	Ala	Ile	Asp	Phe	Ala
		20						25					30		
Ala	Thr	Asn	Gly	Asp	Pro	Arg	Asn	Ser	Cys	Ser	Leu	His	Tyr	Ile	His
		35					40					45			
Pro	Tyr	Gln	Pro	Asn	Glu	Tyr	Leu	Lys	Ala	Leu	Val	Ala	Val	Gly	Glu
	50					55					60				
Ile	Cys	Gln	Asp	Tyr	Asp	Ser	Asp	Lys	Met	Phe	Pro	Ala	Phe	Gly	Phe
65					70					75				80	
Gly	Ala	Arg	Ile	Pro	Pro	Glu	Tyr	Thr	Val	Ser	His	Asp	Phe	Ala	Ile
			85						90				95		
Asn	Phe	Asn	Glu	Asp	Asn	Pro	Glu	Cys	Ala	Gly	Ile	Gln	Gly	Val	Val
			100					105					110		
Glu	Ala	Tyr	Gln	Ser	Cys	Leu	Pro	Lys	Leu	Gln	Leu	Tyr	Gly	Pro	Thr
		115						120					125		
Asn	Ile	Ala	Pro	Ile	Ile	Gln	Lys	Val	Ala	Lys	Ser	Ala	Ser	Glu	Glu
	130					135					140				
Thr	Asn	Thr	Lys	Glu	Ala	Ser	Gln	Tyr	Phe	Ile	Leu	Leu	Ile	Leu	Thr
145				150						155				160	
Asp	Gly	Val	Ile	Thr	Asp	Met	Gly	Asp	Thr	Arg	Glu	Ala	Ile	Val	His
			165					170					175		
Ala	Ser	His	Leu	Pro	Met	Ser	Val	Ile	Ile	Val	Gly	Val	Gly	Asn	Ala
			180					185					190		
Asp	Phe	Ser	Asp	Met	Gln	Met	Leu	Asp	Gly						
	195						200								

<210> 2841

<211> 2065

<212> DNA

<213> Homo sapiens

<400> 2841

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 120  
 gaagggccag ttcaggtggc cggagctcct gagctgccct aggggactgc tgtgggtctg  
 180



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240  
cactctgctg ttcaggagca cccaccctg tctcgacca tgagcagccc cccagcttac  
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660  
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720  
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780  
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840  
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1320  
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1380  
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1440  
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1800

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 1920  
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<210> 2842

<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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Ala	Leu	Gly	Ala	Glu	Gly	Ser	Asn	Ala	Glu	Ser	Leu	Asp	Arg	Leu	Leu
			20					25					30		
Pro	Pro	Val	Gly	Thr	Gly	Arg	Ser	Pro	Arg	Lys	Arg	Thr	Thr	Ser	Gln
			35					40					45		
Cys	Lys	Ser	Glu	Pro	Pro	Leu	Leu	Arg	Thr	Ser	Lys	Arg	Thr	Ile	Tyr
			50					55					60		
Thr	Ala	Gly	Arg	Pro	Pro	Trp	Tyr	Asn	Glu	His	Gly	Thr	Gln	Ser	Lys
						70				75					80
Glu	Ala	Phe	Ala	Ile	Gly	Leu	Gly	Gly	Gly	Ser	Ala	Ser	Gly	Lys	Thr
				85				90						95	
Thr	Val	Ala	Arg	Met	Ile	Ile	Glu	Ala	Leu	Asp	Val	Pro	Trp	Val	Val
				100				105						110	
Leu	Leu	Ser	Met	Asp	Ser	Phe	Tyr	Lys	Val	Leu	His	Ser	Leu	Pro	His
				115				120					125		
Gln	Val	Leu	Thr	Glu	Gln	Gln	Glu	Gln	Ala	Ala	His	Asn	Asn	Phe	
				130				135					140		
Asn	Phe	Asp	His	Pro	Asp	Ala	Phe	Asp	Phe	Asp	Leu	Ile	Ile	Ser	Thr
				145				150					155		160
Leu	Lys	Lys	Leu	Lys	Gln	Gly	Lys	Ser	Val	Lys	Val	Pro	Ile	Tyr	Asp
				165					170					175	
Phe	Thr	Thr	His	Ser	Arg	Lys	Lys	Asp	Trp	Lys	Thr	Leu	Tyr	Gly	Ala
				180				185					190		
Asn	Val	Ile	Ile	Phe	Glu	Gly	Ile	Met	Ala	Phe	Ala	Asp	Lys	Thr	Leu
				195				200					205		
Leu	Glu	Leu	Leu	Asp	Met	Lys	Ile	Phe	Val	Asp	Thr	Asp	Ser	Asp	Ile
				210				215					220		
Arg	Leu	Val	Arg	Arg	Leu	Arg	Arg	Asp	Ile	Ser	Glu	Arg	Gly	Arg	Asp
				225				230				235			240
Ile	Glu	Gly	Val	Ile	Lys	Gln	Tyr	Asn	Lys	Phe	Val	Lys	Pro	Ser	Phe
				245					250					255	
Asp	Gln	Tyr	Ile	Gln	Pro	Thr	Met	Arg	Leu	Ala	Asp	Ile	Val	Val	Pro
				260				265					270		
Arg	Gly	Ser	Gly	Asn	Thr	Val	Ala	Ile	Asp	Leu	Ile	Val	Gln	His	Val
				275				280					285		
His	Ser	Gln	Leu	Glu	Glu	Arg	Glu	Leu	Ser	Val	Arg	Ala	Ala	Leu	Ala

290 295 300  
 Ser Ala His Gln Cys His Pro Leu Pro Arg Thr Leu Ser Val Leu Lys  
 305 310 315 320  
 Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu  
 325 330 335  
 Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu  
 340 345 350  
 Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val  
 355 360 365  
 Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys  
 370 375 380  
 Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro  
 385 390 395 400  
 Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile  
 405 410 415  
 Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu  
 420 425 430  
 Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val  
 435 440 445  
 Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His  
 450 455 460  
 Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu  
 465 470 475 480  
 Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile  
 485 490 495  
 Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro  
 500 505 510  
 Gly Ile Gly Asn Phe Gly Asp Arg Tyr Phe Gly Thr Asp Ala Val Pro  
 515 520 525  
 Asp Gly Ser Asp Glu Glu Glu Val Ala Tyr Thr Gly  
 530 535 540

&lt;210&gt; 2843

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2843

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 120  
 caaagcccag aatttgaagc tcaaagttcc aaattccagg aaggtgcgga gatgcttctg  
 180  
 aaccccgagg aaaagagtcc tttgaatc tccgtaggag ttcacccctt ggactccttc  
 240  
 actcaggggt ttggggagca gccacaggg gacctgcca tagggccacc ttttgagatg  
 300  
 cccacagggg cctgctgtc tacaccgcag tttgagatgc ttcagaatcc cctgggtctc  
 360  
 acaggagccc ttcgaggtcc aggtcggcgg ggtggccggg ccgggggtgg gcagggccct  
 420  
 cggcctaaca tctgtggcat ctgggggaag agcttcgggc gggactaccc tgatccagca  
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caggcatcca caccggt  
497

<210> 2844

<211> 165

<212> PRT

<213> Homo sapiens

<400> 2844

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Tyr	Glu	Pro	Arg	Ser	Pro	Gly	Tyr	Glu	Ser	Glu	Ser	Ser	Arg	Tyr	Glu
			20					25					30		
Ser	Gln	Asn	Thr	Glu	Leu	Lys	Thr	Gln	Ser	Pro	Glu	Phe	Glu	Ala	Gln
		35					40					45			
Ser	Ser	Lys	Phe	Gln	Glu	Gly	Ala	Glu	Met	Leu	Leu	Asn	Pro	Glu	Glu
		50				55				60					
Lys	Ser	Pro	Leu	Asn	Ile	Ser	Val	Gly	Val	His	Pro	Leu	Asp	Ser	Phe
65					70					75					80
Thr	Gln	Gly	Phe	Gly	Glu	Gln	Pro	Thr	Gly	Asp	Leu	Pro	Ile	Gly	Pro
			85						90					95	
Pro	Phe	Glu	Met	Pro	Thr	Gly	Ala	Leu	Leu	Ser	Thr	Pro	Gln	Phe	Glu
			100					105					110		
Met	Leu	Gln	Asn	Pro	Leu	Gly	Leu	Thr	Gly	Ala	Leu	Arg	Gly	Pro	Gly
		115					120					125			
Arg	Arg	Gly	Gly	Arg	Ala	Arg	Gly	Gly	Gln	Gly	Pro	Arg	Pro	Asn	Ile
		130				135					140				
Cys	Gly	Ile	Trp	Gly	Lys	Ser	Phe	Gly	Arg	Asp	Tyr	Pro	Asp	Pro	Ala
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Gln	Ala	Ser	Thr	Pro											
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<210> 2845

<211> 934

<212> DNA

<213> Homo sapiens

<400> 2845

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120  
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180  
tcaggcccca cgggtgggtgc gggggctgtg gaaaggtctc agctgcaggg ggatgaatgt  
240  
gacctccagt tgcaacgtct cccccgcgt gagtgggggtt atcaggccta gctcaccttg  
300  
tgtgcagtca gtgtcgagtg ccacctgcgt actggatgct gctctcagtg ctgcggtgcc  
360  
acagcacaca aaaatagttc tcacgttgcc gtggagagac aagcagtcaa cgcagatata  
420  
tcctgtggca agtgatggta aatgctgtgg caagaaagca ggttctggag gtgaagggcg  
480

gtgggggaga cagggcaggg aaggtgagca gcggtctgag agtcccttgt ggcacctcgt  
 540  
 gggcattagc caaagccgtc ctgatcccaa gggacagggc agggaagggt agtagtggtc  
 600  
 cgagagtcctc ttgtggcacc tcatgggcat cgggtcaaagc cgtcatgacc ccgaggatgt  
 660  
 gccaggagtc agggcctctc ctccctacgtg ggccctgaagg ggctgctgta attcaggagg  
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 780  
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 840  
 ctgtttgtcat agggctgttt gccttggtgt tctgtggagcc ccattgctga gcttacaacg  
 900  
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 934

&lt;210&gt; 2846

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2846

Met	Pro	Met	Arg	Cys	His	Lys	Gly	Leu	Ser	Asp	His	Tyr	Ser	Pro	Ser
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Leu	Pro	Cys	Pro	Leu	Gly	Ser	Gly	Arg	Leu	Trp	Leu	Met	Pro	Thr	Arg
		20					25						30		
Cys	His	Lys	Gly	Leu	Ser	Asp	Arg	Cys	Ser	Pro	Ser	Leu	Pro	Cys	Leu
		35					40					45			
Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
		50				55					60				
Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
65					70					75				80	
Gly	Asn	Val	Arg	Thr	Ile	Phe	Val	Cys	Cys	Gly	Thr	Ala	Ala	Leu	Arg
			85					90						95	
Ala	Ala	Ser	Ser	Thr	Gln	Val	Ala	Leu	Asp	Thr	Asp	Cys	Thr	Gln	Gly
			100					105						110	
Glu	Leu	Gly	Leu	Ile	Thr	Pro	Leu	Thr	Arg	Gly	Glu	Thr	Leu	Gln	Leu
		115					120					125			
Glu	Val	Thr	Phe	Ile	Pro	Leu	Gln	Leu	Arg	Pro	Phe	His	Ser	Pro	Arg
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Thr	His	Arg	Gly	Ala											
145															

&lt;210&gt; 2847

&lt;211&gt; 2830

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2847

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 gtcccctcca tagcaacagt tctctcttgc ctcaaacctt cagctccatt aattcgcctg  
 120

cagctctcac atgaccacga atctgttggc cctcctagcc tggatgctca gcccaactca  
180  
aagacagaaa gatcaaaatc atatgatgag ggtctggatg attacagaga agatgcaaaa  
240  
ttgtccttta agcacgtatc tagtctgaag ggaatcaaga tcgcagacag ccaaaagtca  
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360  
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420  
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480  
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540  
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600  
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780  
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900  
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960  
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1140  
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1320  
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1380  
aagttccttt cagctcatct gaagacagtg gcagaaaatt cagaaaaaaa taagatggaa  
1440  
ccaagaaacc tagcaatagt gtttggctcc acccttgctc gaacatcaga agacaacatg  
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1740

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 2520  
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 2580  
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 2640  
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 2820  
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 2830

&lt;210&gt; 2848

&lt;211&gt; 856

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2848

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 20 25 30  
 Thr Ser Ala Pro Leu Ile Arg Arg Gln Leu Ser His Asp His Glu Ser  
 35 40 45  
 Val Gly Pro Pro Ser Leu Asp Ala Gln Pro Asn Ser Lys Thr Glu Arg  
 50 55 60  
 Ser Lys Ser Tyr Asp Glu Gly Leu Asp Asp Tyr Arg Glu Asp Ala Lys

65					70					75				80	
Leu	Ser	Phe	Lys	His	Val	Ser	Ser	Leu	Lys	Gly	Ile	Lys	Ile	Ala	Asp
				85					90					95	
Ser	Gln	Lys	Ser	Ser	Glu	Asp	Ser	Gly	Ser	Arg	Lys	Asp	Ser	Ser	Ser
			100					105					110		
Glu	Val	Phe	Ser	Asp	Ala	Ala	Lys	Glu	Gly	Trp	Leu	His	Phe	Arg	Pro
			115					120					125		
Leu	Val	Thr	Asp	Lys	Gly	Lys	Arg	Val	Gly	Gly	Ser	Ile	Arg	Pro	Trp
			130					135					140		
Lys	Gln	Met	Tyr	Val	Val	Leu	Arg	Gly	His	Ser	Leu	Tyr	Leu	Tyr	Lys
145						150					155				160
Asp	Lys	Arg	Glu	Gln	Thr	Thr	Pro	Ser	Glu	Glu	Glu	Gln	Pro	Ile	Ser
				165					170					175	
Val	Asn	Ala	Cys	Leu	Ile	Asp	Ile	Ser	Tyr	Ser	Glu	Thr	Lys	Arg	Lys
				180					185					190	
Asn	Val	Phe	Arg	Leu	Thr	Thr	Ser	Asp	Cys	Glu	Cys	Leu	Phe	Gln	Ala
				195				200					205		
Glu	Asp	Arg	Asp	Asp	Met	Leu	Ala	Trp	Ile	Lys	Thr	Ile	Gln	Glu	Ser
						210			215				220		
Ser	Asn	Leu	Asn	Glu	Glu	Asp	Thr	Gly	Val	Thr	Asn	Arg	Asp	Leu	Ile
225						230					235				240
Ser	Arg	Arg	Ile	Lys	Glu	Tyr	Asn	Asn	Leu	Met	Ser	Lys	Ala	Glu	Gln
				245					250					255	
Leu	Pro	Lys	Thr	Pro	Arg	Gln	Ser	Leu	Ser	Ile	Arg	Gln	Thr	Leu	Leu
				260					265					270	
Gly	Ala	Lys	Ser	Glu	Pro	Lys	Thr	Gln	Ser	Pro	His	Ser	Pro	Lys	Glu
				275				280					285		
Glu	Ser	Glu	Arg	Lys	Leu	Ser	Lys	Asp	Asp	Thr	Ser	Pro	Pro	Lys	
				290				295				300			
Asp	Lys	Gly	Thr	Trp	Arg	Lys	Gly	Ile	Pro	Ser	Ile	Met	Arg	Lys	Thr
305						310					315				320
Phe	Glu	Lys	Lys	Pro	Thr	Ala	Thr	Gly	Thr	Phe	Gly	Val	Arg	Leu	Asp
				325					330					335	
Asp	Cys	Pro	Pro	Ala	His	Thr	Asn	Arg	Tyr	Ile	Pro	Leu	Ile	Val	Asp
				340					345				350		
Ile	Cys	Cys	Lys	Leu	Val	Glu	Glu	Arg	Gly	Leu	Glu	Tyr	Thr	Gly	Ile
				355				360					365		
Tyr	Arg	Val	Pro	Gly	Asn	Asn	Ala	Ala	Ile	Ser	Ser	Met	Gln	Glu	Glu
				370			375					380			
Leu	Asn	Lys	Gly	Met	Ala	Asp	Ile	Asp	Ile	Gln	Asp	Asp	Lys	Trp	Arg
385						390					395				400
Asp	Leu	Asn	Val	Ile	Ser	Ser	Leu	Leu	Lys	Ser	Phe	Phe	Arg	Lys	Leu
				405					410					415	
Pro	Glu	Pro	Leu	Phe	Thr	Asn	Asp	Lys	Tyr	Ala	Asp	Phe	Ile	Glu	Ala
				420					425				430		
Asn	Arg	Lys	Glu	Asp	Pro	Leu	Asp	Arg	Leu	Lys	Thr	Leu	Lys	Arg	Leu
				435				440					445		
Ile	His	Asp	Leu	Pro	Glu	His	His	Tyr	Glu	Thr	Leu	Lys	Phe	Leu	Ser
				450				455				460			
Ala	His	Leu	Lys	Thr	Val	Ala	Glu	Asn	Ser	Glu	Lys	Asn	Lys	Met	Glu
465						470					475				480
Pro	Arg	Asn	Leu	Ala	Ile	Val	Phe	Gly	Pro	Thr	Leu	Val	Arg	Thr	Ser
				485					490					495	
Glu	Asp	Asn	Met	Thr	His	Met	Val	Thr	His	Met	Pro	Asp	Gln	Tyr	Lys



	500		505		510
Ile Val Glu Thr Leu Ile Gln His His Asp Trp Phe Phe Thr Glu Glu					
515		520		525	
Gly Ala Glu Glu Pro Leu Thr Thr Val Gln Glu Glu Ser Thr Val Asp					
530		535		540	
Ser Gln Pro Val Pro Asn Ile Asp His Leu Leu Thr Asn Ile Gly Arg					
545		550		555	560
Thr Gly Val Ser Pro Gly Asp Val Ser Asp Ser Ala Thr Ser Asp Ser					
565		570		575	
Thr Lys Ser Lys Gly Ser Trp Gly Ser Gly Lys Asp Gln Tyr Ser Arg					
580		585		590	
Glu Leu Leu Val Ser Ser Ile Phe Ala Ala Ala Ser Arg Lys Arg Lys					
595		600		605	
Lys Pro Lys Glu Lys Ala Gln Pro Ser Ser Ser Glu Asp Glu Leu Asp					
610		615		620	
Asn Val Phe Phe Lys Lys Glu Asn Val Glu Gln Cys His Asn Asp Thr					
625		630		635	640
Lys Glu Glu Ser Lys Lys Glu Ser Glu Thr Leu Gly Arg Lys Gln Lys					
645		650		655	
Ile Ile Ile Ala Lys Glu Asn Ser Thr Arg Lys Asp Pro Ser Thr Thr					
660		665		670	
Lys Asp Glu Lys Ile Ser Leu Gly Lys Glu Ser Thr Pro Ser Glu Glu					
675		680		685	
Pro Ser Pro Pro His Asn Ser Lys His Asn Lys Ser Pro Thr Leu Ser					
690		695		700	
Cys Arg Phe Ala Ile Leu Lys Glu Ser Pro Arg Ser Leu Leu Ala Gln					
705		710		715	720
Lys Ser Ser His Leu Glu Glu Thr Gly Ser Asp Ser Gly Thr Leu Leu					
725		730		735	
Ser Thr Ser Ser Gln Ala Ser Leu Ala Arg Phe Ser Met Lys Lys Ser					
740		745		750	
Thr Ser Pro Glu Thr Lys His Ser Glu Phe Leu Ala Asn Val Ser Thr					
755		760		765	
Ile Thr Ser Asp Tyr Ser Thr Thr Ser Ser Ala Thr Tyr Leu Thr Ser					
770		775		780	
Leu Asp Ser Ser Arg Leu Ser Pro Glu Val Gln Ser Val Ala Glu Ser					
785		790		795	800
Lys Gly Asp Glu Ala Asp Asp Glu Arg Ser Glu Leu Ile Ser Glu Gly					
805		810		815	
Arg Pro Val Glu Thr Asp Ser Gly Asn Glu Phe Pro Ile Phe Pro Thr					
820		825		830	
Ala Leu Thr Ser Glu Arg Leu Phe Arg Gly Glu Leu Gln Lys Val Thr					
835		840		845	
Lys Ser Ser Arg Arg Asn Ser Glu					
850		855			

&lt;210&gt; 2849

&lt;211&gt; 380

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2849

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60

ccctctgagc cgctcgggtg acaccaggca ctctagtagg cctggcctac ccagaaacag  
 120  
 caggagagag aagaaacagg ccagctgtga gaagccaagg acaccgagtc ggtcatggca  
 180  
 cctaaggcgg caaagggggc caagccagag ccagcaccag ctccacctcc acccggggcc  
 240  
 aaacccgagg aagacaagaa ggacggtaag gagccatcgg acaaacctca aaaggcggtg  
 300  
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 380

<210> 2850

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2850

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Ala	Lys	Pro	Glu	Pro	Ala	Pro	Ala	Pro	Pro	Pro	Pro	Gly	Ala	Lys	Pro
			20					25					30		
Glu	Glu	Asp	Lys	Lys	Asp	Gly	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys
			35				40					45			
Ala	Val	Gln	Asp	His	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys	Ala	Val
	50					55					60				
Gln	Pro	Lys	His	Glu	Val	Gly	Thr	Lys	Glu	Gly	Cys				
65					70					75					

<210> 2851

<211> 2459

<212> DNA

<213> Homo sapiens

<400> 2851

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 120  
 tatggaaaat atgaaggact aacaaagaat tacatggatt atttatcccg actatatgaa  
 180  
 agagaaatca aagatttctt tgaagttgca aagatcaaga tgactggcac aactaaagaa  
 240  
 agcaagaagt ttggtcttca tggaagttcg gggaaattaa ctggatctac ttctagtcta  
 300  
 aataagctca gtgttcagag ttcagggaat cgcagatctc agtcattctc cctgttggat  
 360  
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 420  
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 480  
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 540

gcaggctttt gctatatcaa tactagtcaa attgttggtc ttttattatg taaagtgcct  
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1140  
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1320  
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1620  
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1680  
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1740  
ccagacttaa aattttatgt attattaaat gttagataaa tgggtagtac catactacaa  
1800  
atatttaa at gcaaaattac caacctatat agcagtttta tttgccctat aggttgcata  
1860  
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1920  
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1980  
tggagtctt cagctttcac tacttctctg ttgcttgcta atcatgtaac tactaaaata  
2040  
ctgtacaaaa ttgtttttt cacactaaca aatgtgtata tggagaagag ggctcatgtg  
2100  
atgatcattt gtgaacttag atttttgagg attatgtgac tagtaataaa tgtgaaataa  
2160

attttcaaaa aagttgacat ttgaaaaaaa aattagtaac caaataaggc aaatggaaga  
 2220  
 agtaaaagatc tcaaaaaaga gtaaagttgg aattcttcca tttgttgctg aatttgaaga  
 2280  
 atttgctgga cttgcagaat caatcttcaa aaatgctgag cgctggtggag acctggataa  
 2340  
 agcatacacc aaacttatca gaggagtatt tgtcaatgtg gagaaagtag caaatgaaag  
 2400  
 ccagaagacc cccagggatg tggttatgat ggaaaacttt caccatattt ttgcaactc  
 2459

<210> 2852

<211> 317

<212> PRT

<213> Homo sapiens

<400> 2852

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Leu	Asn	Asn	Leu	Ile	Ala	Leu	Gly	Asp	Lys	Ile	Asp	Ser	Phe	Asn	Ser
	20						25				30				
Leu	Tyr	Met	Leu	Val	Lys	Met	Ser	His	His	Val	Trp	Thr	Ala	Gln	Asn
	35					40				45					
Val	Asp	Pro	Ala	Ser	Phe	Leu	Ser	Thr	Thr	Leu	Gly	Asn	Val	Leu	Val
	50					55				60					
Thr	Val	Lys	Arg	Asn	Phe	Asp	Lys	Cys	Ile	Ser	Asn	Gln	Ile	Arg	Gln
65				70				75				80			
Met	Glu	Glu	Val	Lys	Ile	Ser	Lys	Lys	Ser	Lys	Val	Gly	Ile	Leu	Pro
			85					90				95			
Phe	Val	Ala	Glu	Phe	Glu	Glu	Phe	Ala	Gly	Leu	Ala	Glu	Ser	Ile	Phe
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&lt;210&gt; 2858

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2858

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Glu	Glu	Phe	Leu	Val	Ser	Leu	Ala	Leu	Leu	Ile	Thr	Glu	Gly	Arg	Thr
			20					25					30		
Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
		35					40					45			
Ala	Gln	Ser	Cys	Tyr	Pro	Val	Thr	Thr	Lys	His	Glu	Cys	Ser	Asp	Lys

50	55	60
Leu Ala Gln Cys Arg	Gln Ala Arg Arg Thr Arg	Ser Glu Val Thr Leu
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Leu Trp Lys Asn Asn	Leu Pro Ile Met Val Glu Met Met	Leu Leu Pro
85	90	95
Asp Cys Cys Tyr Ser	Asp Asp Gly Pro Thr Thr	Glu Gly Ile Asp Leu
100	105	110
Asn Asp Pro Ala Ile	Lys Gln Asp Ala Leu Leu Leu	Glu Arg Trp Ile
115	120	125
Leu Glu Pro Val Pro	Arg Gln Asn Gly Asp Arg	Phe Ile Glu Glu Lys
130	135	140
Thr Leu Leu Leu Ala	Val Arg Ser Phe Val Phe Phe	Ser Gln Leu Ser
145	150	155
Ala Trp Leu Ser Val	Ser His Gly Ala Ile Pro Arg	Asn Ile Leu Tyr
165	170	175
Arg Ile Ser Ala Ala	Asp Val Asp Leu Gln Trp	Asn Phe Ser Gln Thr
180	185	190
Pro Ile Glu His Val	Phe Pro Val Pro Asn Val	Ser His Asn Val Ala
195	200	205
Leu Lys Val Ser Gly	Gln Ser Leu Ala Gln Thr	Ile
210	215	220

&lt;210&gt; 2859

&lt;211&gt; 1029

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2859

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780

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<210> 2860

<211> 343

<212> PRT

<213> Homo sapiens

<400> 2860

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Asp	Ile	Ser	Ala	Arg	Lys	Met	Ala	His	Pro	Ala	Met	Phe	Pro	Arg	Arg
		35				40						45			
Gly	Ser	Gly	Ser	Gly	Ser	Ala	Ser	Ala	Leu	Asn	Ala	Ala	Gly	Thr	Gly
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Leu	Gln	Pro	Pro	Pro	Pro	Ala	Ala	Ser	Ser	Thr	Ser	Gly	Pro	Gln	Pro
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Gln	Ile	Thr	Ser	Val	Thr	Pro	Ala	Gln	Ile	Ser	Ala	Ser	Ile	Ser	Ser
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Ser	His	Thr	Glu	Asp	Leu	Ser	Ser	Ser	Glu	Ile	Leu	Asp	Val	Ser	Leu
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Ser	Arg	Ala	Thr	Asp	Leu	Gly	Glu	Pro	Glu	Arg	Ser	Ser	Ser	Glu	Glu
			180					185					190		
Thr	Leu	Asn	Asn	Phe	Gln	Glu	Ala	Glu	Thr	Pro	Gly	Ala	Val	Ser	Pro
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	210					215					220				
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His	Gln	Ile	His	His	Gly	His	His	Leu	Gln	His	Gly	His	His	His	Pro
			245						250					255	
Ser	His	Val	Ala	Val	Ala	Ser	Ala	Ser	Ile	Thr	Gly	Gly	Pro	Pro	Ser
		260						265				270			
Ser	Pro	Val	Ser	Arg	Lys	Leu	Ser	Thr	Thr	Gly	Ser	Ser	Asp	Ser	Ile
	275							280				285			
Thr	Pro	Val	Ala	Pro	Thr	Ser	Ala	Val	Ser	Ser	Ser	Gly	Ser	Pro	Ala



290                      295                      300  
 Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly  
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 Ile Asn Ser Val Thr Gly Thr Ser Thr Val Asn Asn Val Asn Ile Thr  
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 Ala Val Gly Ser Phe Asn Ser  
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 <211> 756  
 <212> DNA  
 <213> Homo sapiens

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 Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val  
                          35                      40                      45  
 Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

50		55		60	
Glu	Glu	Lys	Leu	Ala	Ser
65		70		75	
Lys	Lys	Leu	Asp	Ser	Thr
		85		90	
Gly	His	Thr	Gly	Pro	Val
		100		105	
Gly	Ile	Ser	Ser	Gly	Leu
		115		120	
Val	Ser	Leu	Glu	Pro	Leu
		130		135	
Arg	Ser	Ser	Gln	Ile	His
145		150		155	
Ser	Ser	Ser	Gln	Ala	Gln
		165		170	
Ser	Glu	Ala	Gln	Asp	Ala
		180		185	
Gln	His	Ser	Ala	Val	Gln
		195		200	
Ile	Ser	Lys	Ser	Gln	Thr
		210		215	
Gln	Leu	Ser	Cys	Ser	Ser
225		230		235	
Met	Tyr	Arg	Leu	Pro	Leu
		245		250	

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&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2863

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<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

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Ser Gly Arg Ile Val Trp Ser Pro Ala Val Pro Gly Ile Pro Val Arg  
35 40 45  
Ser Ser Ser Leu Pro Leu Phe Ser Asp Ala Met Pro Ala Pro Thr Gln  
50 55 60  
Leu Phe Phe Pro Leu Ile Arg Asn Cys Glu Leu Ser Arg Ile Tyr Gly  
65 70 75 80  
Thr Ala Cys Tyr Cys His His Lys His Leu Cys Cys Ser Ser Ser Tyr  
85 90 95  
Ile Pro Gln Ser Arg Leu Arg Tyr Thr Pro His Pro Ala Tyr Ala Thr  
100 105 110  
Phe Cys Arg Pro Lys Glu Asn Trp Trp Gln Tyr Thr Gln Gly Arg Arg  
115 120 125  
Tyr Ala Ser Thr Pro Gln Lys Phe Tyr Leu Thr Pro Pro Gln Val Asn  
130 135 140  
Ser Ile Leu Lys Ala Asn Glu Tyr Ser Phe Lys Val Pro Glu Phe Asp  
145 150 155 160  
Gly Lys Asn Val Ser Ser Ile Leu Gly Phe Asp Ser Asn Gln Leu Pro  
165 170 175  
Ala Asn Ala Pro Ile Glu Asp Arg Arg Ser Ala Ala Thr Cys Leu Gln  
180 185 190  
Thr Arg Gly Met Leu Leu Gly Val Phe Asp Gly His Ala Gly Cys Ala  
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<211> 585

<212> DNA

<213> Homo sapiens

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ctgcagtgtg aagttttgat atgtgatagc agtgaccacc agtctcgctg caatcaaggt  
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<210> 2867  
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2102

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<213> Homo sapiens

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		20						25					30		
Ala	Lys	Ala	Ser	Gly	Lys	Lys	Leu	Gln	Lys	Val	Thr	Leu	Lys	Val	Ser
		35					40					45			
Pro	Arg	Gly	Ile	Ile	Leu	His	Pro	Gly	His	His	Pro	Ala	Pro	Arg	Gln
	50					55					60				
His	Cys	Cys	His	Ser	Arg	Leu	Val	Ala	Ala	Ala	Pro	Arg	Pro	Cys	Trp
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<210> 2870

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2870

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Ser	Lys	Arg	Phe	Lys	Thr	Met	Ser	Pro	Ser	Gln	Met	Ile	Met	Pro	Asn
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Val	Met	Glu	Met	Ile	Ala	Ala	Leu	Gly	Pro	Gly	Pro	Ser	Pro	Tyr	Pro
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			85					90					95		
Pro	Gly	Gly	Thr	Ser	Met	Asn	Asp	Phe	Met	His	Gly	Pro	Pro	Gln	Leu
			100					105					110		
Ser	His	Pro	Pro	Asp	Met	Pro	Asn	Asn	Met	Ala	Ala	Leu	Glu	Lys	Pro
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			165					170					175		
Pro	Ser	Gln	Pro	Pro	Arg	Gln	Pro	Pro	Gln	Ala	Ala	Pro	Ser	Ser	His
		180					185					190			
Pro	His	Ser	Asp	Leu	Thr	Phe	Asn	Pro	Ser	Ser	Ala	Leu	Glu	Gly	Gln
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	210				215					220					
Leu	Pro	Glu	Leu	Thr	Asn	Pro	Asp	Glu	Leu	Leu	Ser	Tyr	Leu	Asp	Pro
225				230					235				240		
Pro	Asp	Leu	Pro	Ser	Asn	Ser	Asn	Asp	Asp	Leu	Leu	Ser	Leu	Phe	Glu
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Asn Asn

<210> 2871

<211> 786

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2871

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 660  
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 786

&lt;210&gt; 2872

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2872

Gly	Thr	Met	Thr	Arg	Cys	Ser	His	Gln	Gln	Ser	Pro	Tyr	Gln	Leu	Leu
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Phe	Gly	Glu	Pro	Tyr	Ile	Phe	Glu	Glu	Leu	Leu	Gly	Leu	Lys	Ile	Arg
			20					25					30		
Ile	Ser	Pro	Asp	Ala	Phe	Phe	Gln	Ile	Asn	Thr	Ala	Gly	Ala	Glu	Met
			35				40					45			
Leu	Tyr	Trp	Thr	Val	Gly	Glu	Leu	Thr	Gly	Val	Asn	Ser	Asp	Thr	Ile
	50					55				60					
Leu	Leu	Asp	Ile	Cys	Cys	Gly	Thr	Gly	Val	Ile	Gly	Leu	Pro	Leu	Ala
65				70					75					80	
Gln	His	Thr	Ser	Arg	Val	Leu	Gly	Ile	Glu	Leu	Leu	Glu	Gln	Ala	Val
			85					90						95	
Glu	Asp	Ala	Arg	Trp	Thr	Ala	Ala	Phe	Asn	Gly	Ile	Thr	Asn	Ser	Glu
		100					105					110			
Phe	His	Thr	Gly	Gln	Ala	Glu	Lys	Ile	Leu	Pro	Gly	Leu	Leu	Lys	Ser
		115					120					125			
Lys	Glu	Asp	Gly	Gln	Ser	Ile	Val	Ala	Val	Val	Asn	Pro	Ala	Arg	Ala

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<210> 2874  
 <211> 248  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2874

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 Lys Leu Lys Ala Ser Ser Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala  
 35 40 45  
 Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro  
 50 55 60  
 Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala  
 65 70 75 80  
 Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile  
 85 90 95  
 Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His  
 100 105 110  
 Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val  
 115 120 125  
 Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val  
 130 135 140  
 Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser  
 145 150 155 160  
 Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile  
 165 170 175  
 Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro  
 180 185 190  
 Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu  
 195 200 205  
 Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala  
 210 215 220  
 Glu Phe Ala Arg Leu Gln Asp Gln Leu Asp His Arg Gly Asp His Pro  
 225 230 235 240  
 Leu Thr Pro Gly Ser His Tyr Ala  
 245

&lt;210&gt; 2875

&lt;211&gt; 593

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2875

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<210> 2876

<211> 193

<212> PRT

<213> Homo sapiens

<400> 2876

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Pro	Gly	Pro	Lys	Thr	Val	Thr	Leu	Lys	Arg	Thr	Ser	Gln	Gly	Phe	Gly
	50				55				60						
Phe	Thr	Leu	Arg	His	Phe	Ile	Val	Tyr	Pro	Pro	Glu	Ser	Ala	Ile	Gln
65				70				75						80	
Phe	Ser	Tyr	Lys	Asp	Glu	Glu	Asn	Gly	Asn	Arg	Gly	Gly	Lys	Gln	Arg
			85				90						95		
Asn	Arg	Leu	Glu	Pro	Met	Asp	Thr	Ile	Phe	Val	Lys	Gln	Val	Lys	Glu
		100					105					110			
Gly	Gly	Pro	Ala	Phe	Glu	Ala	Gly	Leu	Cys	Thr	Gly	Asp	Arg	Ile	Ile
		115					120					125			
Lys	Val	Asn	Gly	Glu	Ser	Val	Ile	Gly	Lys	Thr	Tyr	Ser	Gln	Val	Ile
	130					135					140				
Ala	Leu	Ile	Gln	Asn	Ser	Asp	Thr	Thr	Leu	Glu	Leu	Ser	Val	Met	Pro
145				150					155					160	
Lys	Asp	Glu	Asp	Ile	Leu	Gln	Val	Val	Ser	Phe	Ile	Tyr	Ser	Tyr	Met
			165				170						175		
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Tyr

<210> 2877

<211> 1921

<212> DNA

<213> Homo sapiens

<400> 2877

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1800

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<210> 2878

<211> 451

<212> PRT

<213> Homo sapiens

<400> 2878

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		20					25						30		
Thr	Glu	Glu	Gly	Lys	Glu	Val	Trp	Asp	Tyr	Val	Thr	Val	Arg	Lys	Asp
		35					40						45		
Ala	Tyr	Met	Phe	Trp	Trp	Leu	Tyr	Tyr	Ala	Thr	Thr	Pro	Ala	Arg	Thr
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Ser	Glu	Leu	Pro	Leu	Val	Met	Trp	Leu	Gln	Gly	Gly	Pro	Gly	Gly	Ser
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Ser	Thr	Gly	Phe	Gly	Asn	Phe	Glu	Glu	Ile	Gly	Pro	Leu	Asp	Ser	Asp
			85						90					95	
Leu	Lys	Pro	Arg	Lys	Thr	Thr	Trp	Leu	Gln	Ala	Ala	Ser	Leu	Leu	Phe
		100						105						110	
Val	Asp	Asn	Pro	Val	Gly	Thr	Gly	Phe	Ser	Tyr	Val	Asn	Gly	Ser	Gly
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Ala	Tyr	Ala	Lys	Asp	Leu	Ala	Met	Val	Ala	Ser	Asp	Met	Met	Val	Leu
	130					135						140			
Leu	Lys	Thr	Phe	Phe	Ser	Cys	His	Lys	Glu	Phe	Gln	Thr	Val	Pro	Phe
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Leu	Glu	Leu	Tyr	Lys	Ala	Ile	Gln	Arg	Gly	Thr	Ile	Lys	Cys	Asn	Phe
		180					185							190	
Ala	Gly	Val	Ala	Leu	Gly	Asp	Ser	Trp	Ile	Ser	Pro	Val	Asp	Ser	Val
		195					200					205			
Leu	Ser	Trp	Gly	Pro	Tyr	Leu	Tyr	Ser	Met	Ser	Leu	Leu	Glu	Asp	Lys
	210					215						220			
Gly	Leu	Ala	Glu	Val	Ser	Lys	Val	Ala	Glu	Gln	Val	Leu	Asn	Ala	Val
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			245					250						255	
Met	Ile	Ile	Glu	Gln	Asn	Thr	Asp	Gly	Val	Asn	Phe	Tyr	Asn	Ile	Leu
		260						265					270		
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		275					280						285		
Gln	Ser	His	Leu	Val	Cys	Leu	Cys	Gln	Arg	His	Val	Arg	His	Leu	Gln
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Arg	Asp	Ala	Leu	Ser	Gln	Leu	Met	Asn	Gly	Pro	Ile	Arg	Lys	Lys	Leu
305					310					315				320	
Lys	Ile	Ile	Pro	Glu	Asp	Gln	Ser	Trp	Gly	Gly	Gln	Ala	Thr	Asn	Val

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Phe Val Asn Met Glu Glu Asp Phe Met Lys Pro Val Ile Asp Ile Val					
	340		345		350
Asp Thr Leu Leu Glu Ala Gly Val Asn Val Thr Val Tyr Asn Gly Gln					
	355		360		365
Leu Asp Leu Ile Val Asp Thr Ile Gly Gln Glu Ala Trp Val Arg Lys					
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Leu Lys Trp Pro Glu Leu Ser Arg Phe Asn Gln Leu Lys Trp Lys Ala					
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Leu Tyr Ser Asp Pro Lys Ser Leu Glu Thr Ser Ala Phe Val Lys Ser					
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Tyr Lys Asn Leu Ala Phe Tyr Trp Ile Leu Lys Ala Gly His Met Val					
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Pro Ser Asp Gln Gly Asp Met Ala Leu Lys Met Met Arg Leu Val Thr					
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Gln Gln Glu					
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&lt;210&gt; 2879

&lt;211&gt; 1352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2879

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<210> 2880

<211> 376

<212> PRT

<213> Homo sapiens

<400> 2880

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Gln	Leu	Asp	Pro	His	Lys	Leu	Glu	Val	Gly	Ala	Lys	Leu	Asp	Leu	Phe	195	200	205	
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Ala Pro Gly Gly Ser Ile Phe Ala Pro Lys Glu Gly Ser Ser Val Leu					
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Gly Leu Pro Ser Pro His Glu Ala Trp Ser Arg Leu His Arg Ala Pro					
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Pro Ser Phe Pro Ala Pro Pro Pro Trp Pro Lys Ser Val Asp Ala Glu					
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&lt;210&gt; 2881

&lt;211&gt; 3021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2881

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&lt;210&gt; 2882

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2882

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		20					25					30			
Val	His	Pro	Gln	His	Phe	Leu	Arg	Lys	Arg	Thr	Pro	Ala	Gln	Ala	Gly
	35					40					45				
Pro	Ala	Ile	Ser	Pro	Leu	Pro	Thr	Asp	Ser	Gln	Ser	Pro	Leu	Ala	Ser
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Pro	Leu	Asp	Val	Ser	Gly	Gln	Gly	Ser	Gly	Gly	Cys	Ser	Phe	Asp	Lys
65				70			75							80	
Lys	Lys	Lys	Lys	Phe	Tyr	Val	Phe	Lys	Leu	Leu	Leu	Gln	Asp	Phe	Asn
				85				90						95	

&lt;210&gt; 2883

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2883

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<210> 2884

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2884

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			20					25					30		
Pro	Ser	Ser	Val	Asp	Thr	Tyr	Pro	Tyr	Gly	Leu	Pro	Thr	Pro	Pro	Glu
			35					40				45			
Met	Ser	Pro	Leu	Asp	Val	Leu	Glu	Pro	Glu	Gln	Thr	Phe	Phe	Ser	Ser
			50				55				60				
Pro	Cys	Gln	Glu	Glu	His	Gly	His	Pro	Arg	Arg	Ile	Pro	His	Leu	Pro
65					70				75					80	
Gly	His	Pro	Tyr	Ser	Pro	Glu	Tyr	Ala	Pro	Ser	Pro	Leu	His	Cys	Ser
				85					90					95	
His	Pro	Leu	Gly	Ser	Leu	Ala	Leu	Gly	Gln	Ser	Pro	Gly	Val	Ser	Met
			100					105					110		
Met	Ser	Pro	Val	Pro	Gly	Cys	Pro	Pro	Ser	Pro	Ala	Tyr	Tyr	Ser	Pro
			115				120					125			
Ala	Thr	Tyr	His	Pro	Leu	His	Ser	Asn	Leu	Gln	Ala	His	Leu	Gly	Gln
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<211> 807

<212> DNA

<213> Homo sapiens

<400> 2885

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&lt;210&gt; 2886

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2886

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		20						25				30			
Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala
		35					40					45			
Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
	50					55					60				
Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
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Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
			85						90				95		
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
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Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
		115					120					125			
Leu	Gln	Lys	Ala	Glu	Glu	His	Glu	Glu	Ser	Gln	Gly	Pro	Val	Gly	Met
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Glu	Thr	Glu	Thr	Ile	Asn	Gln	Gln	Leu	Asn	Met	Phe	Lys	Val	Phe	Gln
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Lys	Glu	Glu	Ile	Glu	Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp
			165					170						175	
Leu	Gly	Gln	Gly	Leu	Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln
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Gly	Leu	Glu	His	Asp	Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu
		195				200						205			
Asn	Lys	Lys	Val	Ala	Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu
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His	Cys	Gly	Arg	Phe	Gln	Asp	Ala	Leu	Glu	Ser	Leu	Leu	Ser	Trp	Met

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Val	Asp	Thr	Glu	Glu	Leu	Val	Ala	Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu
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&lt;210&gt; 2887

&lt;211&gt; 1945

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2887

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 1945

&lt;210&gt; 2888

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2888

Met	Met	Lys	Pro	Ser	Trp	Leu	Ser	Arg	Thr	Glu	Phe	Ser	Lys	Arg	Leu
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		20					25						30		
Thr	Arg	Ser	Met	Leu	Lys	Met	Thr	Ser	Ile	Asn	Arg	Arg	Ser	Arg	
	35						40				45				
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Thr	Val	Ser	Ile	Gly	Leu	Ser	Asp	Ser	Pro	Thr	Trp	Arg	His	Cys	Trp
65				70						75				80	
Met	Thr	Ala	Arg	Ser	Cys	Ser	Gly	Glu	Lys	Gly	Gly	His	Trp	Ala	Pro
			85					90					95		
Arg	Gln	Val	Gly	Val	Tyr	Leu	Leu	Pro	Gly	Arg	Val	Gly	Cys	Val	Ser
		100						105					110		
Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
	115						120				125				
Ala	Arg	Arg	Gly	Ser	Ala	Val	Ser	Ala	Leu	Ala	Ser	Gly	Leu	Val	Glu
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Glu	Pro	Met	Leu	Gly	Pro	Pro	Phe	His	Pro	Thr	Pro	Arg	Phe	Lys	Ala
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			165					170					175		
Phe	Thr	Ile	Glu	Asp	Phe	His	Asn	Thr	Phe	Met	Asp	Leu	Ile	Glu	Gln



	180		185		190										
Val	Glu	Lys	Gln	Thr	Ser	Val	Ala	Asp	Leu	Leu	Ala	Ser	Phe	Asn	Asp
	195		200		205										
Gln	Ser	Thr	Ser	Asp	Tyr	Leu	Val	Val	Tyr	Leu	Arg	Leu	Leu	Thr	Ser
	210		215		220										
Gly	Tyr	Leu	Gln	Arg	Glu	Ser	Lys	Phe	Phe	Glu	His	Phe	Ile	Glu	Gly
	225		230		235									240	
Gly	Arg	Thr	Val	Lys	Glu	Phe	Cys	Gln	Gln	Glu	Val	Glu	Pro	Met	Cys
			245		250									255	
Lys	Glu	Ser	Asp	His	Ile	His	Ile	Ile	Ala	Leu	Ala	Gln	Ala	Leu	Ser
	260		265		270										
Val	Ser	Ile	Gln	Val	Glu	Tyr	Met	Asp	Arg	Gly	Glu	Gly	Gly	Thr	Thr
	275		280		285										
Asn	Pro	His	Ile	Phe	Pro	Glu	Gly	Ser	Glu	Pro	Lys	Val	Tyr	Leu	Leu
	290		295		300										
Tyr	Arg	Pro	Gly	His	Tyr	Asp	Ile	Leu	Tyr	Lys					
	305		310		315										

&lt;210&gt; 2889

&lt;211&gt; 614

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2889

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614

&lt;210&gt; 2890

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2890

Val His Leu Pro Glu Val Gln Leu Pro Lys Val Ser Glu Ile Arg Leu

1	5	10	15
Pro Glu Met Gln Val Xaa Glu Val	Pro Asp Val His Leu Pro Lys Xaa		
20	25	30	
Pro Glu Val Lys Leu Pro Arg Ala	Pro Glu Val Gln Leu Lys Ala Thr		
35	40	45	
Lys Ala Glu Gln Ala Glu Gly Met	Glu Phe Gly Phe Lys Met Pro Lys		
50	55	60	
Met Thr Met Pro Lys Leu Gly Arg	Ala Glu Ser Pro Ser Arg Gly Lys		
65	70	75	80
Pro Gly Glu Ala Gly Ala Glu Val	Ser Gly Lys Leu Val Thr Leu Pro		
85	90	95	
Cys Leu Gln Pro Glu Val Asp Gly	Glu Ala His Val Gly Val Pro Ser		
100	105	110	
Leu Thr Leu Pro Ser Val Glu Leu	Asp Leu Pro Gly Ala Leu Gly Leu		
115	120	125	
Gln Gly Gln Val Pro Ala Ala Lys	Met Gly Lys Gly Glu Arg Ala Glu		
130	135	140	
Gly Pro Glu Val Ala Ala Gly Val	Arg Glu Val Gly Phe Arg Val Pro		
145	150	155	160
Ser Val Glu Ile Val Thr Pro Gln	Leu Pro Ala Val Glu Ile Glu Glu		
165	170	175	
Gly Arg Leu Glu Met Ile Glu Thr	Lys Val Lys Pro Ser Ser Lys Phe		
180	185	190	
Ser Leu Pro Lys Phe Gly Leu Ser	Gly Pro Lys Val		
195	200		

&lt;210&gt; 2891

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2891

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&lt;210&gt; 2892

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 <212> PRT  
 <213> Homo sapiens

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 Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg  
 35 40 45  
 Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser  
 50 55 60  
 Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val  
 65 70 75 80  
 Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr  
 85 90

<210> 2893  
 <211> 2270  
 <212> DNA  
 <213> Homo sapiens

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2270

&lt;210&gt; 2894

&lt;211&gt; 490

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2894

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	20			25		30									
Gln	Val	Ser	Val	Ser	Leu	His	Pro	Gly	Thr	Gly	Leu	Phe	Ser	Pro	Phe
	35			40		45									
Cys	Ser	Val	Pro	Leu	Trp	Cys	Ile	Tyr	Phe	Leu	Ser	Phe	Cys	Ile	Val
	50			55		60									
Leu	Ser	Leu	Pro	Ser	Ala	Ser	Leu	His	Leu	Cys	Leu	Ser	Cys	Leu	His
65				70		75								80	
Phe	Leu	Asn	Leu	Asp	Cys	Pro	Cys	Leu	Phe	Leu	Cys	His	Ser	Leu	Ser
			85			90								95	
Ser	Pro	Ser	Val	Cys	Gly	Ser	Ala	Ser	Leu	Ser	His	Ser	Pro	Tyr	Asn
	100					105							110		
Trp	Pro	Leu	Pro	Ala	Gln	Thr	Phe	Leu	Asp	Glu	Leu	His	Glu	Thr	Gly
	115					120							125		
Gln	Leu	His	Ser	Met	Ser	Thr	Trp	Met	Glu	Leu	Tyr	Pro	Ala	Val	Ser
	130					135						140			
Thr	Asp	Val	Arg	Phe	Ala	Asn	Met	Leu	Gly	Gln	Pro	Gly	Ser	Thr	Pro
145				150		155								160	
Leu	Asp	Leu	Phe	Lys	Phe	Tyr	Val	Glu	Glu	Leu	Lys	Ala	Arg	Phe	His
			165			170								175	
Asp	Glu	Lys	Lys	Ile	Ile	Lys	Asp	Ile	Leu	Lys	Asp	Arg	Gly	Phe	Cys
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Val	Glu	Val	Asn	Thr	Ala	Phe	Glu	Asp	Phe	Ala	His	Val	Ile	Ser	Phe
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Asp	Lys	Arg	Ala	Ala	Ala	Leu	Asp	Ala	Gly	Asn	Ile	Lys	Leu	Thr	Phe
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Asn	Ser	Leu	Leu	Glu	Lys	Ala	Glu	Ala	Arg	Glu	Arg	Glu	Arg	Glu	Lys
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			245			250								255	
Leu	Arg	Gln	Ala	Val	Pro	Ala	Leu	Glu	Leu	Gly	Thr	Ala	Trp	Glu	Glu
	260					265							270		
Val	Arg	Glu	Arg	Phe	Val	Cys	Asp	Ser	Ala	Phe	Glu	Gln	Ile	Thr	Leu
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Thr	Glu	Cys	Gln	His	Leu	His	Thr	Lys	Gly	Arg	Lys	His	Gly	Arg	Lys
305				310		315								320	
Gly	Lys	Lys	His	His	His	Lys	Arg	Ser	His	Ser	Pro	Ser	Gly	Ser	Glu
			325			330								335	
Ser	Glu	Glu	Glu	Glu	Leu	Pro	Pro	Pro	Ser	Leu	Arg	Pro	Pro	Lys	Arg
	340					345								350	
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Asp	Ser	Val	Glu	Ser	Gly	Gly	Ala	Ala	Leu	Gly	Gly	Arg	Gly	Ser	Pro
	370					375						380			
Ser	Ser	His	Leu	Leu	Gly	Ala	Asp	His	Gly	Leu	Arg	Lys	Ala	Lys	Lys
385				390		395								400	
Pro	Lys	Lys	Lys	Thr	Lys	Lys	Arg	Arg	His	Lys	Ser	Asn	Ser	Pro	Glu
			405			410								415	
Ser	Glu	Thr	Asp	Pro	Glu	Glu	Lys	Ala	Gly	Lys	Glu	Ser	Asp	Glu	Lys
	420					425							430		
Glu	Gln	Glu	Gln	Asp	Lys	Asp	Arg	Glu	Leu	Gln	Gln	Ala	Glu	Leu	Pro

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 Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp  
 450                      455                      460  
 Thr Ser Glu Ser Glu Leu Ser Glu Gly Glu Leu Glu Arg Arg Arg Arg  
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 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
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                     20                      25                      30  
 Pro Leu Arg Gly Pro Ser Ala Thr Ser Ser Cys Arg Gly Gly Asn Ala  
                     35                      40                      45  
 Pro Gln Gly Leu Gln Lys Gly Gly Gly Glu Ala Pro Val Leu Leu Leu  
                     50                      55                      60  
 Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

65		70		75		80									
Ala	Pro	Ala	Pro	Cys	Ser	Asn	Arg	Leu	Arg	Ser	Pro	Ser	Pro	Pro	Ser
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Leu	Pro	Pro	Asp	Arg	Pro	Arg	Pro	Pro	Ala	Arg	Arg	His	Ser	Phe	Arg
		100						105					110		
Gly	Pro	Ala	Leu	Arg	Ser	Gly	Pro	Pro	Leu	Pro	Pro	Pro	Pro	Arg	Arg
		115						120					125		
Pro	Leu	Leu	Arg	Pro	Pro	Val	Ala	Ala	Ala	Leu	Pro	Pro	Gln	Pro	Ala
		130					135						140		
Pro	Ser	Leu	Pro	Ala	Ser	Arg	Ala	His	Ser	Cys	Pro	Gly	Arg	Pro	Arg
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Leu	Gly	Gly	Val	Glu	Gln	Pro	Leu	Glu	Val	Leu	Gly	Asp	Ala		
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&lt;210&gt; 2897

&lt;211&gt; 3184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2897

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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

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			20					25					30		
Asn	Glu	Cys	Val	Gln	Cys	Glu	Phe	Asn	Phe	Ile	Asn	Thr	Gly	Lys	Phe
	35						40					45			
Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
	50					55					60				
Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
65				70					75					80	
Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
			85					90					95		
Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
			100					105					110		
Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
	115						120					125			
Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
	130					135					140				
Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
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Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
			165					170					175		
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
			180					185					190		
Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
	195					200						205			
Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

210	215	220
Met Lys Ile Leu Val	Leu Asp Pro Ala Asn Arg Ile Val Lys Leu Gly	
225	230	235
Ala Val Leu Pro Gly Gln Val Val Lys Arg Thr Val Ser Ile Met Asn		240
	245	250
Asn Ser Leu Ala Gln Leu Thr Phe Asn Gln Ser Ile Leu Phe Thr Ile		255
	260	265
Pro Glu Leu Gln Glu Pro Lys Val Leu Thr Leu Ala Pro Phe His Asn		270
	275	280
Ile Thr Leu Lys Pro Lys Glu Val Cys Lys Leu Glu Val Ile Phe Ala		285
	290	295
Pro Lys Lys Arg Val Pro Pro Phe Ser Glu Glu Val Phe Met Glu Cys		300
305	310	315
Met Gly Leu Leu Arg Pro Leu Phe Leu Leu Ser Gly Cys Cys Gln Ala		320
	325	330
Leu Glu Ile Ser Leu Asp Gln Glu His Ile Pro Phe Gly Pro Val Val		335
	340	345
Tyr Gln Thr Gln Ala Thr Arg Arg Ile Leu Met Leu Asn Thr Gly Asp		350
	355	360
Val Gly Ala Arg Phe Lys Trp Asp Ile Lys Lys Phe Glu Pro His Phe		365
	370	375
Ser Ile Ser Pro Glu Glu Gly Tyr Ile Thr Ser Gly Met Glu Val Ser		380
385	390	395
Phe Glu Val Thr Tyr His Pro Thr Glu Val Gly Lys Glu Ser Leu Cys		400
	405	410
Lys Asn Ile Leu Cys Tyr Ile Gln Gly Gly Ser Pro Leu Ser Leu Thr		415
	420	425
Leu Ser Gly Val Cys Val Gly Pro Pro Ala Val Lys Glu Val Val Asn		430
	435	440
Phe Thr Cys Gln Val Arg Ser Lys His Thr Gln Thr Ile Leu Leu Ser		445
	450	455
Asn Arg Thr Asn Gln Thr Trp Asn Leu His Pro Ile Phe Glu Gly Glu		460
465	470	475
His Trp Glu Gly Pro Glu Phe Ile Thr Leu Glu Ala His Gln Gln Asn		480
	485	490
Lys Pro Tyr Glu Ile Thr Tyr Arg Pro Arg Thr Met Asn Leu Glu Asn		495
	500	505
Arg Lys His Gln Gly Thr Leu Phe Pro Leu Pro Asp Gly Thr Gly		510
	515	520
Trp Leu Tyr Ala Leu His Gly Thr Ser Glu Leu Pro Lys Ala Val Ala		525
	530	535
Asn Ile Tyr Arg Glu Val Pro Cys Lys Thr Pro Tyr Thr Glu Leu Leu		540
545	550	555
Pro Ile Thr Asn Trp Leu Asn Lys Pro Gln Arg Phe Arg Val Ile Val		560
	565	570
Glu Ile Leu Lys Pro Glu Lys Pro Asp Leu Ser Ile Thr Met Lys Gly		575
	580	585
Leu Asp Tyr Ile Asp Val Leu Ser Gly Ser Lys Lys Asp Tyr Lys Leu		590
	595	600
Asn Phe Phe Ser His Lys Glu Gly Thr Tyr Ala Ala Lys Val Ile Phe		605
	610	615
Arg Asn Glu Val Thr Asn Glu Phe Leu Tyr Tyr Asn Val Ser Phe Arg		620
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Val Ile Pro Ser Gly Ile Ile Lys Thr Ile Glu Met Val Thr Pro Val		640

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<210> 2899
<211> 876
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 2900

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2900

Met	Thr	Val	Val	Glu	Ala	Asp	Asp	Asp	Lys	Lys	Arg	Leu	Leu	Gln
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Ile	Ile	Asp	Arg	Asp	Gly	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Pro	Leu
			20				25					30		
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg
		35				40					45			Ser
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu
	50					55				60				Lys
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met
65				70				75					80	His
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu
			85					90					95	Asn
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp
			100				105					110		Val
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp
	115					120					125			Thr
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu
	130					135					140			Val
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu
145					150				155					160
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala
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Val	Glu	Asn	Met	Ala	Glu	Phe	Arg	Pro	Glu	Met	Cys	Thr		
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&lt;210&gt; 2901

&lt;211&gt; 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2901

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&lt;210&gt; 2902

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2902

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Ala	Glu	Glu	Gly	Pro	Pro	Val	Gln	Ser	Leu	Lys	Gly	Glu	Asp	Ala	Glu
			20					25				30			
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35					40					45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
		50				55					60				
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65					70					75				80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85					90						95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105					110		
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115					120					125			
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

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<210> 2903  
 <211> 542  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 420  
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<210> 2904  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 2904  
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 Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr  
 35 40 45  
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr  
 50 55 60  
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser  
 65 70 75 80  
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe  
 85 90 95  
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu  
 100 105 110  
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln  
 115 120 125  
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

130 135 140  
 His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg  
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 Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala  
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 Pro Pro Ser Arg  
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<210> 2905  
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 <213> Homo sapiens

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 300  
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 720  
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 814

<210> 2906  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 2906  
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 Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

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<211> 379
<212> DNA
<213> Homo sapiens
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379
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<210> 2908
<211> 113
<212> PRT
<213> Homo sapiens
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<400> 2908

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			20				25					30			
Phe	Pro	Arg	Leu	Leu	Ser	Asn	Phe	Gln	His	Cys	Pro	Gln	Asp	Tyr	Lys



	35		40		45	
Gly	Lys Gly Ile Leu Pro Leu Met Leu Asp Gly	Pro Glu Thr Ala Pro				
	50		55		60	
Pro	Trp Ala His Tyr Thr Gly Thr Ser Phe Lys Leu Pro Cys Ser Thr					
65		70		75		80
Arg	Arg Ala Pro Gln Pro Arg Thr Thr Glu Gln Met Met Ala Arg Arg					
	85		90		95	
Pro	Gln Asn Pro Asp Arg Pro Ser Trp Leu Ala Leu Ala Asp Ala Thr					
	100		105		110	
Gly						

&lt;210&gt; 2909

&lt;211&gt; 2420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2909

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2420

&lt;210&gt; 2910

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2910

Met Gly Thr Glu Gly Ser Lys Gly Gly Ile Arg Ser Ala Pro Lys Pro

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Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr
                35           40           45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His
                50           55           60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His
65           70           75           80
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe
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Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro
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Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser
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Gly Pro Val Leu Thr Gly Ile Arg Gly Gln Glu Arg Gln Val Cys Leu
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Cys Leu Gly Leu Ile Gly Arg Leu Val
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&lt;210&gt; 2911

&lt;211&gt; 1327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2911

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 1327

&lt;210&gt; 2912

&lt;211&gt; 350

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2912

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			20					25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser
		35					40					45			
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
		50				55					60				
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Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
			85						90				95		
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
		115					120					125			
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
		130				135					140				
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Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
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Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
		195					200					205			
Asn	Thr	Val	Lys	Asn	Ile	Gly	Asp	Leu	Leu	Ser	Ser	Ser	Ile	Asp	Arg
210					215						220				
Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn

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 Ser Val Lys Lys Thr Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His  
                                  245                      250                      255  
 Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys  
                                  260                      265                      270  
 Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys  
                                  275                      280                      285  
 Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg  
                                  290                      295                      300  
 Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala  
 305                                   310                                   315                                   320  
 Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile  
                                  325                                   330                                   335  
 Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn  
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&lt;210&gt; 2913

&lt;211&gt; 361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2913

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 g  
 361

&lt;210&gt; 2914

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2914

Met Ala Gly Gly Ser Ser Gly Ser Ser Ser Glu Lys Met Ala Arg Tyr  
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 Trp Val Met Ile Ser Lys Arg Trp Thr Arg Glu Ala Leu Asp Gly Phe  
                                  20                                   25                                   30  
 Cys Asn Met Glu Ile Gly Ile Ile Arg Asn Gly Ser Gln Asp Gly  
                                  35                                   40                                   45  
 Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser  
                                  50                                   55                                   60  
 Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala  
 65                                   70                                   75                                   80  
 Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln

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His	Gln	Leu	His	Gly	Leu	Ala	His	Phe	Val	His	Asp	Ala	Leu	Asp	Asp
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<211> 1782															
<212> DNA															
<213> Homo sapiens															
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240															
acaagggagt tttttactga tgctgacttc caggatgcct tagctaaaga aatagccaaa															
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gaagagaaaa agcatgagca aatgataaaa gaataccaag agaaaattga cgtgttaagc															
360															
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<210> 2916

<211> 519

<212> PRT

<213> Homo sapiens

<400> 2916

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			20					25					30		
Ile	Gln	Glu	Val	Glu	Leu	Lys	Ala	Ser	Ala	Ala	Asp	Arg	Glu	Ile	Tyr
		35					40					45			
Leu	Leu	Arg	Thr	Ser	Leu	His	Arg	Glu	Arg	Glu	Gln	Ala	Gln	Gln	Leu
		50				55					60				
His	Gln	Leu	Leu	Ala	Leu	Lys	Glu	Gln	Glu	His	Arg	Lys	Glu	Leu	Glu
65					70					75				80	
Thr	Arg	Glu	Phe	Phe	Thr	Asp	Ala	Asp	Phe	Gln	Asp	Ala	Leu	Ala	Lys
			85						90					95	
Glu	Ile	Ala	Lys	Glu	Glu	Lys	Lys	His	Glu	Gln	Met	Ile	Lys	Glu	Tyr
		100						105				110			
Gln	Glu	Lys	Ile	Asp	Val	Leu	Ser	Gln	Gln	Tyr	Met	Asp	Leu	Glu	Asn
		115					120					125			
Glu	Phe	Arg	Ile	Ala	Leu	Thr	Val	Glu	Ala	Arg	Arg	Phe	Gln	Asp	Val
	130					135					140				
Lys	Asp	Gly	Phe	Glu	Asn	Val	Ala	Thr	Glu	Leu	Ala	Lys	Ser	Lys	His
145					150					155				160	
Ala	Leu	Ile	Trp	Ala	Gln	Arg	Lys	Glu	Asn	Glu	Ser	Ser	Ser	Leu	Ile
			165					170						175	
Lys	Asp	Leu	Thr	Cys	Met	Val	Lys	Glu	Gln	Lys	Thr	Lys	Leu	Ala	Glu
		180						185					190		
Val	Ser	Lys	Leu	Lys	Gln	Glu	Thr	Ala	Ala	Asn	Leu	Gln	Asn	Gln	Ile
		195					200					205			
Asn	Thr	Leu	Glu	Ile	Leu	Ile	Glu	Asp	Asp	Lys	Gln	Lys	Ser	Ile	Gln
	210					215					220				
Ile	Glu	Leu	Leu	Lys	His	Glu	Lys	Val	Gln	Leu	Ile	Ser	Glu	Leu	Ala
225					230					235				240	
Ala	Lys	Glu	Ser	Leu	Ile	Phe	Gly	Leu	Arg	Thr	Glu	Arg	Lys	Val	Trp
			245					250					255		
Gly	His	Glu	Leu	Ala	Gln	Gln	Gly	Ser	Ser	Leu	Ala	Gln	Asn	Arg	Gly

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275	280	285
Arg Lys Thr Asn Glu Ser Asp Ser	Asp Ala Leu Arg Ile Lys Cys Lys	
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Ile Ile Asp Asp Gln Thr Glu Thr	Ile Arg Lys Leu Lys Asp Cys Leu	
305	310	315
Gln Glu Lys Asp Glu His Ile Lys	Arg Leu Gln Glu Lys Ile Thr Glu	
325	330	335
Ile Glu Lys Cys Thr Gln Glu Gln	Leu Asp Glu Lys Ser Ser Gln Leu	
340	345	350
Asp Glu Val Leu Glu Lys Leu Glu	Arg His Asn Glu Arg Lys Glu Lys	
355	360	365
Leu Lys Gln Gln Leu Lys Gly Lys	Glu Val Glu Leu Glu Glu Ile Arg	
370	375	380
Lys Ala Tyr Ser Thr Leu Asn Arg	Lys Trp His Asp Lys Gly Glu Leu	
385	390	395
Leu Cys His Leu Glu Thr Gln Val	Lys Glu Val Lys Glu Lys Phe Glu	
405	410	415
Asn Lys Glu Lys Lys Leu Lys Ala	Glu Arg Asp Lys Ser Ile Glu Leu	
420	425	430
Gln Lys Asn Ala Met Glu Lys Leu	His Ser Met Asp Asp Ala Phe Lys	
435	440	445
Arg Gln Val Asp Ala Ile Val Glu	Ala His Gln Ala Glu Ile Ala Gln	
450	455	460
Leu Ala Asn Glu Lys Gln Lys Cys	Ile Asp Ser Ala Asn Leu Lys Val	
465	470	475
His Gln Ile Glu Lys Glu Met Arg	Glu Leu Leu Glu Glu Thr Cys Lys	
485	490	495
Asn Lys Lys Thr Met Glu Ala Lys	Ile Lys Gln Leu Ala Phe Ala Leu	
500	505	510
Asn Glu Ile Gln Gln Asp Met		
515		

&lt;210&gt; 2917

&lt;211&gt; 2636

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2917

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&lt;210&gt; 2918

&lt;211&gt; 509

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2918

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			20					25				30			
Met	Asp	Glu	Leu	Val	Pro	Leu	Gly	Glu	Leu	Thr	Lys	His	Ser	Thr	Ser
		35					40					45			
Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
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			85					90					95		
Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
			100					105					110		
Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
		115					120					125			
Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
		130				135					140				
Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
145					150				155					160	
His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
			165					170					175		
Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
			180					185					190		
His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
		195					200					205			
Ala	Ile	Leu	Pro	Leu	Met	Lys	Phe	Leu	Glu	Val	Glu	Leu	Cys	Tyr	Met

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      210              215              220
Asn Thr Asn Leu Val Gln Glu Asn Phe Ser Ser Leu Leu Thr Leu Leu
225              230              235              240
Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg
      245              250              255
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu
      260              265              270
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu
      275              280              285
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala
      290              295              300
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln
305              310              315              320
Gln Gln Ala Glu Thr Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys
      325              330              335
Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser
      340              345              350
Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe
      355              360              365
Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala
      370              375              380
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu
385              390              395              400
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala
      405              410              415
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp
      420              425              430
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser
      435              440              445
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr
      450              455              460
Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg
465              470              475              480
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg
      485              490              495
Ala Lys Gln Ala Ser Gln His Ala Leu Arg Pro Ala Pro
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&lt;210&gt; 2919

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2919

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120
aggactagct ttggagacgg gcgttggtca agcagcaggg agaggagttt ggacacacaa
180
gctggctggc tcaggatggc ttacctatg tggctccttg agagatcatt gagaagacta
240
aggacatcct ggagcgcgtc attcccagca gctgggttgc cacagcactc tgtggctcgg
300

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<210> 2920

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2920

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Glu	Lys	Glu	Glu	Gly	Gly	Ser	Thr	Glu	Ala	Val	His	Ser	Gly	Leu	Ala
		20						25					30		
Arg	Gln	Val	Ser	Ser	Leu	Leu	Thr	Asn	His	Leu	Ala	Arg	Ala	Thr	Glu
		35					40					45			
Cys	Cys	Gly	Asn	Gln	Ala	Ala	Gly	Asn	Asp	Ala	Leu	Gln	Asp	Val	Leu
	50					55					60				
Ser	Leu	Leu	Asn	Asp	Leu	Ser	Arg	Ser	His	Ile	Gly	Lys	Ala	Ile	Leu
	65				70					75				80	
Ser	Gln	Pro	Ala	Cys	Val	Ser	Lys	Leu	Leu	Ser	Leu	Leu	Leu	Asp	Gln
			85					90						95	
Arg	Pro	Ser	Pro	Lys	Leu	Val	Leu	Ile	Ile	Leu	Gln	Leu	Cys	Arg	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Met	Ser	Val	Glu	Asp	Cys	Gly	Asn	Val	Glu	Leu	Pro
		115					120					125			
Pro	Trp	Ser	Tyr	Ser	Val	Pro	Ser	Leu	Asn	Ser	Glu	Gln	Glu	Asp	
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<210> 2921

<211> 1855

<212> DNA

<213> Homo sapiens

<400> 2921

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 420  
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gtggtggtat tagatcatgc gtatcacggc cacctgagct ccttgattga catcagtcce  
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1740  
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1855

&lt;210&gt; 2922

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2922

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Arg Leu Ile Ser Ser Cys Arg Leu Phe Phe Pro Glu Asp Pro Val			
20	25	30	
Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala			
35	40	45	
Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His			
50	55	60	
Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr			
65	70	75	80
Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu			
85	90	95	
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser			
100	105	110	
Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr			
115	120	125	
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
130	135	140	
Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
145	150	155	160
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
165	170	175	
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
180	185	190	
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
195	200	205	
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
210	215	220	
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala			
225	230	235	240
Gly Gly Val Phe Val Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val			
245	250	255	
Gly Lys His Phe Trp Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro			
260	265	270	
Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
275	280	285	
Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
290	295	300	
Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
305	310	315	320
Gly Leu Ala Val Leu Asn Val Leu Glu Lys Glu Gln Leu Gln Asp His			
325	330	335	
Ala Thr Ser Val Gly Ser Phe Leu Met Gln Leu Leu Trp Gln Gln Lys			
340	345	350	
Ile Arg His Pro Ile Val Gly Asp Val Arg Gly Val Gly Leu Phe Ile			
355	360	365	
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
370	375	380	
Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
385	390	395	400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
405	410	415	
Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
420	425	430	
Ala Ile Leu Thr Asp Met Glu Glu Lys Val Arg Ser Cys Glu Thr Leu			

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Arg Leu Gln Pro  
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440

445

<210> 2923  
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<212> DNA  
<213> Homo sapiens

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120  
tggagccctt ccccggtggg accaccctcc ttccagcaaa atgccggcca agctcaagga  
180  
gaaacagcgt ttattgtgga ggggagctgg gcggggctca gcctcggaga actggcagta  
240  
cagccgcccc agcctcggct ccacccatag ccggaacggg atctccagga tggcagagaa  
300  
gccttcagcc agcgttgggg cctcgaactg cttcctggca gtggtgggaa cagtgaaggga  
360  
cagcctggat catgtggccc agccagtgcc cctgccccct gctatcccca acagtacctg  
420  
tagccataca tgaccatgtc tgacacgggg atatgagagg agtccgtcat ctctcgaaac  
480  
cggttgttgt ggcgcgcttg ctccagagtg gcggtgaaga ggaagcagcg gcaggggacg  
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572

<210> 2924  
<211> 91  
<212> PRT  
<213> Homo sapiens

<400> 2924  
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20 25 30  
Arg Arg Asn Ser Val Tyr Cys Gly Gly Glu Leu Gly Gly Ala Gln Pro  
35 40 45  
Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala  
50 55 60  
Gly Thr Gly Ser Pro Gly Trp Gln Arg Ser Leu Gln Pro Ala Leu Gly  
65 70 75 80  
Pro Arg Thr Ala Ser Trp Gln Trp Trp Glu Gln  
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<210> 2925  
<211> 1999  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 2925

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180  
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240  
gatgtgttcg aggtggagaa gatcctggac atgaagaccg aggggggtaa agttctttac  
300  
aaagtctcgt ggaaaggcta tacatcggat gatgatacct gggagccccg gattcacctg  
360  
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420  
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480  
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660  
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1020  
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1140  
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1320  
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1440  
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1500  
accatagacg atcacaaaac caaggaaaac aaacagtcac ttaaagaaag gagaaacacc  
1560



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<210> 2926

<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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			20				25						30		
Ser	Gln	Val	Glu	Ser	Glu	Ser	Ser	Val	Leu	Asn	Asp	Ser	Pro	Phe	Pro
		35				40					45				
Glu	Asp	Asp	Asn	Glu	Gly	Leu	His	Ser	Asp	Ser	Arg	Glu	Glu	Lys	Gln
		50			55					60					
Asn	Thr	Lys	Ser	Ala	Arg	Glu	Arg	Ala	Gly	Gln	Asp	Met	Gly	Leu	Glu
65				70				75					80		
His	Gly	Phe	Glu	Lys	Pro	Leu	Asp	Ser	Ala	Met	Ser	Ala	Glu	Glu	Asp
			85					90					95		
Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Lys	Thr	Pro	Arg	Lys	Ala	Glu
		100					105					110			
Asp	Thr	Arg	Glu	Asn	Arg	Lys	Leu	Glu	Asn	Lys	Asn	Ala	Phe	Leu	Glu
		115				120					125				
Lys	Lys	Thr	Val	Pro	Lys	Lys	Gln	Arg	Asn	Gln	Asp	Arg	Ser	Lys	Ser
		130				135					140				
Ala	Ala	Glu	Leu	Glu	Lys	Leu	Met	Pro	Val	Ser	Ala	Gln	Thr	Pro	Lys
145					150					155				160	
Gly	Arg	Arg	Leu	Ser	Gly	Glu	Glu	Arg	Gly	Leu	Trp	Ser	Thr	Asp	Ser
			165					170						175	
Ala	Glu	Glu	Asp	Lys	Glu	Thr	Lys	Arg	Asn	Glu	Ser	Lys	Glu	Lys	Tyr
		180					185						190		
Gln	Lys	Arg	His	Asp	Ser	Asp	Lys	Glu	Glu	Lys	Gly	Arg	Lys	Glu	Pro
		195					200					205			
Lys	Gly	Leu	Lys	Thr	Leu	Lys	Glu	Ile	Arg	Asn	Ala	Phe	Asp	Leu	Phe
		210				215					220				
Lys	Leu	Thr	Pro	Glu	Glu	Lys	Asn	Asp	Val	Ser	Glu	Asn	Asn	Arg	Lys
225					230					235				240	
Arg	Glu	Glu	Ile	Pro	Leu	Asp	Phe	Lys	Thr	Ile	Asp	Asp	His	Lys	Thr

245 250 255  
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 260 265 270  
 Thr Asp Thr Trp Ala Tyr Ile Ala Ala Glu Gly Asp Gln Glu Val Leu  
 275 280 285  
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 <211> 1084  
 <212> DNA  
 <213> Homo sapiens  
  
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 780  
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 960  
 atggtcctat ttcacccctt tcttctgtc acatgacccc ccccatgtt ttattaaag  
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 1080  
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 1084

<210> 2928  
 <211> 292  
 <212> PRT  
 <213> Homo sapiens

<400> 2928  
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 Ser Gly Cys Arg Arg Arg Pro Trp Asp Val Arg Gly Leu Arg Asp Leu  
 20 25 30  
 Ser Leu Arg Pro Ala Thr Phe Ser Gly Val Asn Cys Leu Ala Tyr Asp  
 35 40 45  
 Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln Glu Ile Ala Val  
 50 55 60  
 Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys  
 65 70 75 80  
 Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys Ile Lys Asp Leu  
 85 90 95  
 His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys  
 100 105 110  
 Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp  
 115 120 125  
 Ser Lys Glu Leu Gln Arg Phe Lys Ala Val Ser Ala Lys Ser Lys Glu  
 130 135 140  
 Asp Leu Val Ser Gln Gly Phe Thr Glu Phe Thr Ile Glu Asp Phe His  
 145 150 155 160  
 Asn Thr Phe Met Asp Leu Ile Glu Gln Val Glu Lys Gln Thr Ser Val  
 165 170 175  
 Ala Asp Leu Leu Ala Ser Phe Asn Asp Gln Ser Thr Ser Asp Tyr Leu  
 180 185 190  
 Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser  
 195 200 205  
 Lys Phe Phe Glu His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe  
 210 215 220  
 Cys Gln Gln Glu Val Glu Pro Met Cys Lys Glu Ser Asp His Ile His  
 225 230 235 240  
 Ile Ile Ala Leu Ala Gln Ala Leu Ser Val Ser Ile Gln Val Glu Tyr  
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 <213> Homo sapiens

<400> 2930

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Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe
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Lys Pro Lys Met Leu Asp Lys Lys Lys Pro Thr Pro Ile Ile Pro Glu
      130          135          140
Lys Thr Val Arg Val Val Ile Asn Phe Lys Lys Thr Gln Lys Thr Ile
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Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp
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Pro Lys Pro Ser Asn Glu Ile Thr Arg Glu Tyr Ile Pro Lys Ile Gly		750
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Ala Leu Gly Lys Lys His Thr His Glu Asn Val Lys Glu Thr Ala Ile		800



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<211> 625

<212> DNA

<213> Homo sapiens

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&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2932

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&lt;210&gt; 2933

&lt;211&gt; 688

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2933

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&lt;210&gt; 2934

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2934

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Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
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Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr
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Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
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225															

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<211> 1200  
<212> DNA  
<213> Homo sapiens

<400> 2935  
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240  
cgcagctatt tacgttcaga gtgaaatggg ctgtgtggct gggattggga aaggccttgt  
300  
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360  
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420  
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480  
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720  
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1080  
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1200

<210> 2936  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 2936  
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Val Lys Val Lys Met Glu Lys Lys Ser Thr Pro Ser Arg Gly Ser Ser
35           40           45
Ser Lys Ser Ser Ser Arg Gln Leu Ser Glu Ser Phe Lys Ser Lys Glu
50           55           60
Phe Val Ser Ser Asp Glu Ser Ser Ser Gly Glu Asn Lys Ser Lys Lys
65           70           75           80
Lys Arg Arg Arg Ser Glu Asp Ser Glu Glu Glu Leu Ala Ser Thr
85           90           95
Pro Pro Ser Ser Glu Asp Ser Ala Ser Gly Ser Asp Glu
100          105

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&lt;210&gt; 2937

&lt;211&gt; 749

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2937

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cgagtcaaaa agctgacatg tcgggtaaaa attaaagaag caacgggggt gcccttaaac
120
ctctcaaatt ttgtcttctg tcaatacaca ttctgggacc agtgtgagtc tacggtggct
180
gccccgggtg tggaccccgga ggtgccttca ccacagtcca aggatgccca gtacacagtg
240
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300
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420
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480
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540
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720
agttatcagg aagaagactt aaactgcag
749

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&lt;210&gt; 2938

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2938

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Xaa Asn Ser Ser Glu Ser Gly Ser Leu Glu Val Val Asp Ser Ser Gly

```

1	5	10	15
Glu Ile Ile His Arg Val Lys Lys Leu Thr Cys Arg Val Lys Ile Lys			
20	25	30	
Glu Ala Thr Gly Leu Pro Leu Asn Leu Ser Asn Phe Val Phe Cys Gln			
35	40	45	
Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val			
50	55	60	
Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val			
65	70	75	80
Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe			
85	90	95	
Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His			
100	105	110	
Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His			
115	120	125	
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg			
130	135	140	
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr			
145	150	155	160
Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile			
165	170	175	
Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys			
180	185	190	
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu			
195	200	205	
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg			
210	215	220	
Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp			
225	230	235	240
Ser Tyr Gln Glu Glu Asp Leu Asn Cys			
245			

&lt;210&gt; 2939

&lt;211&gt; 2405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2939

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300
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360
cagttcgagg acatgcagga aatcattcag aactttgtgc gggttcatgt ggatgccctt
420
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480

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720  
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840  
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2100

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<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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		20						25					30		
Tyr	Gly	Ser	Val	Thr	Phe	Thr	Val	Tyr	Gly	Thr	Pro	Lys	Pro	Lys	Arg
		35					40					45			
Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys
	50					55				60					
Phe	Gln	Pro	Leu	Phe	Gln	Phe	Glu	Asp	Met	Gln	Glu	Ile	Ile	Gln	Asn
65					70					75				80	
Phe	Val	Arg	Val	His	Val	Asp	Ala	Pro	Gly	Met	Glu	Glu	Gly	Ala	Pro
			85						90					95	
Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp
		100					105						110		
Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
	115					120						125			
Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn
	130					135					140				
His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn
145					150					155				160	
Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr
			165						170					175	
Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu
		180					185						190		
Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
	195					200						205			
His	Ala	Pro	Asn	Leu	Asp	Asn	Ile	Glu	Leu	Tyr	Trp	Asn	Ser	Tyr	Asn
	210					215						220			
Asn	Arg	Arg	Asp	Leu	Asn	Phe	Glu	Arg	Gly	Gly	Asp	Ile	Thr	Leu	Arg
225					230					235				240	
Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala
			245						250				255		
Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
		260					265					270			
Lys	Met	Ala	Asp	Ser	Gly	Gly	Gln	Pro	Gln	Leu	Thr	Gln	Pro	Gly	Lys



275	280	285
Leu Thr Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met Gly Tyr Met Ala		
290	295	300
Ser Ser Cys Met Thr Arg Leu Ser Arg Ser Arg Thr Ala Ser Leu Thr		
305	310	315
Ser Ala Ala Ser Val Asp Gly Asn Arg Ser Arg Ser Arg Thr Leu Ser		
	325	330
Gln Ser Ser Glu Ser Gly Thr Leu Ser Ser Gly Pro Pro Gly His Thr		
	340	350
Met Glu Val Ser Cys		
355		

&lt;210&gt; 2941

&lt;211&gt; 847

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2941

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 180  
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 660  
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 720  
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 847

&lt;210&gt; 2942

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2942

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 20 25 30  
 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln  
 35 40 45  
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro  
 50 55 60  
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr  
 65 70 75 80  
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu  
 85 90 95  
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro  
 100 105 110  
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys  
 115 120 125  
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala  
 130 135 140  
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln  
 145 150 155 160  
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp  
 165 170 175  
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys  
 180 185 190  
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala  
 195 200 205  
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu  
 210 215 220  
 Gln Asp Pro Gln Ala  
 225

&lt;210&gt; 2943

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2943

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 120  
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 180  
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 240  
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 300  
 aagaagatga gagagggtcc tgcaaagaat atggtcaagc agaaagcctt gcgagtttta  
 360  
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 420  
 aacgccatt ataccatcca gtctttgaag gacaccaaga ccacggttga tgctatgaaa  
 480

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 a  
 1501

&lt;210&gt; 2944

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2944

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Leu	Thr	Asp	Cys	Ile	Gly	Thr	Val	Asp	Ser	Arg	Ala	Glu	Ser	Ile	Asp
			20					25				30			
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
		35					40					45			
Ile	Lys	Lys	Met	Arg	Glu	Gly	Pro	Ala	Lys	Asn	Met	Val	Lys	Gln	Lys
	50					55					60				
Ala	Leu	Arg	Val	Leu	Lys	Gln	Lys	Arg	Met	Tyr	Glu	Gln	Gln	Arg	Asp
65				70						75				80	
Asn	Leu	Ala	Asn	Ser	His	Ser	Thr	Trp	Asn	Ala	Asn	Tyr	Thr	Ile	Gln

	85		90		95										
Ser	Leu	Lys	Asp	Thr	Lys	Thr	Thr	Val	Asp	Ala	Met	Lys	Leu	Gly	Val
	100				105								110		
Lys	Glu	Met	Lys	Lys	Ala	Tyr	Lys	Gln	Val	Lys	Ile	Asp	Gln	Ile	Glu
	115						120					125			
Asp	Leu	Gln	Asp	Gln	Leu	Glu	Asp	Met	Met	Glu	Asp	Ala	Asn	Glu	Ile
	130						135				140				
Gln	Glu	Ala	Leu	Ser	Arg	Ser	Tyr	Gly	Thr	Pro	Glu	Leu	Asp	Glu	Asp
	145				150					155				160	
Asp	Leu	Glu	Ala	Glu	Leu	Asp	Ala	Leu	Gly	Asp	Glu	Leu	Leu	Ala	Asp
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Glu	Asp	Ser	Ser	Tyr	Leu	Asp	Glu	Ala	Ala	Ser	Ala	Pro	Ala	Ile	Pro
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Glu	Gly	Val	Pro	Thr	Asp	Thr	Lys	Asn	Lys	Asp	Gly	Val	Leu	Val	Asp
	195						200					205			
Glu	Phe	Gly	Leu	Pro	Gln	Ile	Pro	Ala	Ser						
	210						215								

&lt;210&gt; 2945

&lt;211&gt; 3331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2945

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&lt;210&gt; 2946

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2946

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Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
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Val	Pro	Ser	Asp	Gln	Asp	Ala	His	Gln	Tyr	Leu	Arg	Leu	Arg	Asp	Gln
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Gln	Asp	Ala	Ala	Gly	Arg	Gly	Gly	Thr	Pro	Gln	Ile	Arg	Val	Val	Gly
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Gly	Arg	Gly	His	Val	Ala	Ile	Lys	Ala	Gly	Gln	Glu	Glu	Gly	Gln	Pro
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Pro	Ala	Glu	Gly	Leu	Ala	Ala	Ala	Ser	Val	Val	Met	Ala	Ala	Asp	Arg
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Ser	Leu	Lys	Lys	Gly	Val	Gln	Gly	Gly	Glu	Lys	Ala	Leu	Glu	Ile	Cys

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 Ala Glu Glu Val Lys Thr Gly Lys Cys Ala Thr Val Ser Ala Ala Val  
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 Ala Glu Arg Glu Ser Ala Glu Val Val Val Lys Glu Gly Leu Ala Glu  
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 Lys Glu Val Met Glu Glu Gln Met Glu Val Glu Glu Gln Pro Pro Glu  
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 Gly Glu Glu Ile Glu Val Ala Glu Glu Asp Arg Leu Glu Glu Glu Ala  
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 Arg Glu Glu Glu Gly Pro Trp Pro Leu His Glu Ala Leu Arg Met Asp  
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 Pro Leu Glu Ala Ile Gln Leu Glu Leu Asp Thr Val Asn Ala Gln Ala  
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 Asp Arg Ala Phe Gln Gln Leu Glu His Lys Phe Gly Arg Met Arg Arg  
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 His Tyr Leu Glu Arg Arg Asn Tyr Ile Ile Gln Asn Ile Pro Gly Phe  
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 Gly Gln Asp Ala Glu Met Leu Arg Tyr Ile Thr Asn Leu Glu Val Lys  
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 Glu Leu Arg His Pro Arg Thr Gly Cys Lys Phe Lys Phe Phe Phe Arg  
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 Arg Ser Ser Gly Arg Val Val Ser Leu Ser Thr Pro Ile Ile Trp Arg  
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 Arg Gly His Glu Pro Gln Ser Phe Ile Arg Arg Asn Gln Asp Leu Ile  
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 Cys Ser Phe Phe Thr Trp Phe Ser Asp His Ser Leu Pro Glu Ser Asp  
                                  405                                   410                                   415  
 Lys Ile Ala Glu Ile Ile Lys Glu Asp Leu Trp Pro Asn Pro Leu Gln  
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 Tyr Tyr Leu Leu Arg Glu Gly Val Arg Arg Ala Arg Arg Arg Pro Leu  
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&lt;210&gt; 2947

&lt;211&gt; 997

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2947

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&lt;210&gt; 2948

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2948

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His	Leu	Gly	Cys	His	Ser	Asp	Leu	Val	Thr	Asp	Leu	Asp	Phe	Ser	Pro
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Phe	Asp	Asp	Phe	Leu	Leu	Ala	Thr	Gly	Ser	Ala	Asp	Arg	Thr	Val	Lys
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Val	Val	Leu	Gly	Pro	Glu	Asp	Leu	Pro	Val	Glu	Val	Leu	Gln	Phe	His
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Lys Pro Arg Ala Ser Gln Ser Thr Gln Ala His Glu Asn Ser Arg Asp					
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Ser Arg Leu Ala Trp Met Gly Thr Trp Glu His Leu Val Ser Thr Gly					
	225		230		235
Phe Asn Gln Met Arg Glu Arg Glu Val Lys Leu Trp Asp Thr Arg Phe					
	245		250		255
Phe Ser Ser Ala Leu Ala Ser Leu Thr Leu Asp Thr Ser Leu Gly Cys					
	260		265		270
Leu Val Pro Leu Leu Asp Pro Asp Ser Gly Leu Leu Val Leu Ala Gly					
	275		280		285
Lys Gly Glu Arg Gln Leu Tyr Cys Tyr Glu Val Val Pro Gln Gln Pro					
	290		295		300
Ala Leu Ser Pro Val Thr Gln Cys Val Leu Glu Ser Val Leu Arg Gly					
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&lt;210&gt; 2949

&lt;211&gt; 880

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2949

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<210> 2950

<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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			20					25					30		
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Ser	Ile	Leu	Leu	Lys	Phe	Leu	Arg	Pro	Ser	Pro	Asn	Val	Lys	Leu	Glu
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Pro	Lys	Tyr	Leu	Ile	Val	Val	Arg	Pro	Ala	Pro	Pro	Pro	Ser	Gln	Lys
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Lys	Ser	Cys	Ser	Gly	Lys	Thr	Arg	Ser	Arg	Lys	Pro	Leu	Gln	Leu	Val
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	210					215						220			
Val	Asn	Gly	Lys	Ile	Gln	Ser	Thr	Tyr	Asp	Gln	Asp	His	Thr	Val	Pro
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Ile	Gln	Asn	Val	Thr	His	Lys	Asp	Ser	Ala	Lys	Ser	Pro	Glu	Lys	Ala
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<210> 2951

<211> 3478

<212> DNA

<213> Homo sapiens

<400> 2951

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<210> 2952

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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			20					25					30		
Gly	Ser	Pro	Arg	Glu	Phe	Ile	Tyr	Leu	Asn	Arg	Tyr	Lys	Arg	Ala	Gly
		35					40					45			
Glu	Ser	Gln	Asp	Lys	Cys	Thr	Tyr	Thr	Phe	Ile	Val	Pro	Gln	Gln	Arg
		50				55					60				
Val	Thr	Gly	Ala	Ile	Cys	Val	Asn	Ser	Lys	Glu	Pro	Glu	Val	Leu	Leu
65				70						75				80	
Glu	Asn	Arg	Val	His	Lys	Gln	Glu	Leu	Glu	Leu	Leu	Asn	Asn	Glu	Leu
			85					90						95	
Leu	Lys	Gln	Lys	Arg	Gln	Ile	Glu	Thr	Leu	Gln	Gln	Leu	Val	Glu	Val
			100					105					110		
Asp	Gly	Gly	Ile	Val	Ser	Glu	Val	Lys	Leu	Leu	Arg	Lys	Glu	Ser	Arg
		115					120					125			
Asn	Met	Asn	Ser	Arg	Val	Thr	Gln	Leu	Tyr	Met	Gln	Leu	Leu	His	Glu
		130					135					140			
Ile	Ile	Arg	Lys	Arg	Asp	Asn	Ala	Leu	Glu	Leu	Ser	Gln	Leu	Glu	Asn
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Arg	Ile	Leu	Asn	Gln	Thr	Ala	Asp	Met	Leu	Gln	Leu	Ala	Ser	Lys	Tyr
			165					170						175	
Lys	Asp	Leu	Glu	His	Lys	Phe	Gln	His	Leu	Ala	Met	Leu	Ala	His	Asn
			180					185						190	
Gln	Ser	Glu	Ile	Ile	Ala	Gln	Leu	Glu	Glu	His	Cys	Gln	Arg	Val	Pro
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			260					265					270		
Gly	Pro	Trp	Arg	Asp	Cys	Leu	Gln	Ala	Leu	Glu	Asp	Gly	His	Asp	Thr
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Ser	Ser	Ile	Tyr	Leu	Val	Lys	Pro	Glu	Asn	Thr	Asn	Arg	Leu	Met	Gln
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Val	Trp	Cys	Asp	Gln	Arg	His	Asp	Pro	Gly	Gly	Trp	Thr	Val	Ile	Gln

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Arg Arg Leu Asp	Gly Ser Val Asn Phe	Phe Arg Asn Trp Glu Thr Tyr				
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Lys Gln Gly Phe	Gly Asn Ile Asp Gly Glu Tyr Trp Leu Gly Leu Glu					
	340	345			350	
Asn Ile Tyr Trp	Leu Thr Asn Gln Gly Asn Tyr Lys Leu Leu Val Thr					
	355	360			365	
Met Glu Asp Trp	Ser Gly Arg Lys Val Phe Ala Glu Tyr Ala Ser Phe					
	370	375			380	
Arg Leu Glu Pro	Glu Ser Glu Tyr Tyr Lys Leu Arg Leu Gly Arg Tyr					
	385	390			395	400
His Gly Asn Ala	Gly Asp Ser Phe Thr Trp His Asn Gly Lys Gln Phe					
	405	410			415	
Thr Thr Leu Asp	Arg Asp His Asp Val Tyr Thr Gly Asn Cys Ala His					
	420	425			430	
Tyr Gln Lys Gly	Gly Trp Trp Tyr Asn Ala Cys Ala His Ser Asn Leu					
	435	440			445	
Asn Gly Val Trp	Tyr Arg Gly Gly His Tyr Arg Ser Arg Tyr Gln Asp					
	450	455			460	
Gly Val Tyr Trp	Ala Glu Phe Arg Gly Gly Ser Tyr Ser Leu Lys Lys					
	465	470			475	480
Val Val Met Met	Ile Arg Pro Asn Pro Asn Thr Phe His					
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&lt;210&gt; 2953

&lt;211&gt; 1377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2953

```

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&lt;210&gt; 2954

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2954

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Glu	Val	Leu	Gly	Ala	Leu	Glu	Ala	Lys	Thr	Gly	Val	Glu	Lys	Arg	Tyr
			20					25					30		
Leu	Ala	Ala	Gly	Ala	Val	Thr	Leu	Leu	Ser	Leu	Tyr	Leu	Leu	Phe	Gly
			35				40					45			
Tyr	Gly	Ala	Ser	Leu	Leu	Cys	Asn	Leu	Ile	Gly	Phe	Val	Tyr	Pro	Ala
			50			55				60					
Tyr	Ala	Ser	Ile	Lys	Ala	Ile	Glu	Ser	Pro	Ser	Lys	Asp	Asp	Asp	Thr
65				70					75					80	
Val	Trp	Leu	Thr	Tyr	Trp	Val	Val	Tyr	Ala	Leu	Phe	Gly	Leu	Ala	Glu
			85					90					95		
Phe	Phe	Ser	Asp	Leu	Leu	Leu	Ser	Trp	Phe	Pro	Phe	Tyr	Tyr	Val	Gly
			100					105					110		
Lys	Cys	Ala	Phe	Leu	Leu	Phe	Cys	Met	Ala	Pro	Arg	Pro	Trp	Asn	Gly
			115				120					125			
Ala	Leu	Met	Leu	Tyr	Gln	Arg	Val	Val	Arg	Pro	Leu	Phe	Leu	Arg	His
			130			135				140					
His	Gly	Ala	Val	Asp	Arg	Ile	Met	Asn	Asp	Leu	Ser	Gly	Arg	Ala	Leu
145				150						155				160	
Asp	Ala	Ala	Ala	Gly	Ile	Thr	Arg	Asn	Val	Lys	Pro	Ser	Gln	Thr	Pro
			165					170					175		
Gln	Pro	Lys	Asp	Lys											
			180												

&lt;210&gt; 2955

&lt;211&gt; 295

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2955

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&lt;210&gt; 2956

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2956

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			20					25					30		
Ser	Gln	Gly	Met	Pro	Cys	Pro	Cys	Leu	Thr	Phe	Pro	Leu	Phe	Trp	His
		35					40					45			
Ile	Asn	Ser	Tyr	Phe	Pro	Ile	Ser	His	Tyr	Lys	Gly	His	Thr	Val	Leu
	50					55					60				
Pro	Leu	Pro	Leu	Ser	Ser	Lys	Ile	Ala	Ser	Pro	Pro	Phe	Ser	Leu	Ile
65					70					75				80	
Ile	Gly	Ile	Ser	Lys	Gln	Ala	Ala	Ala	Gln	Ala					
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&lt;210&gt; 2957

&lt;211&gt; 4724

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2957

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&lt;210&gt; 2958

&lt;211&gt; 1047

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2958

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Leu	Tyr	Ser	Asn	Trp	Arg	Lys	Gly	Glu	Asp	Glu	Tyr	Ala	Asn	Val	Asp
			20					25					30		
Ala	Ile	Val	Val	Ser	Val	Gly	Val	Asp	Glu	Glu	Ile	Val	Tyr	Ala	Lys
		35					40					45			
Ser	Thr	Ala	Leu	Gln	Thr	Trp	Leu	Phe	Gly	Tyr	Glu	Leu	Thr	Asp	Thr
	50					55					60				
Ile	Met	Val	Phe	Cys	Asp	Asp	Lys	Ile	Ile	Phe	Met	Ala	Ser	Lys	Lys

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Lys	Val	Glu	Phe	Leu	Lys	Gln	Ile	Ala	Asn	Thr	Lys	Gly	Asn	Glu	Asn
				85					90					95	
Ala	Asn	Gly	Ala	Pro	Ala	Ile	Thr	Leu	Leu	Ile	Arg	Glu	Lys	Asn	Glu
			100					105					110		
Ser	Asn	Lys	Ser	Ser	Phe	Asp	Lys	Met	Ile	Glu	Ala	Ile	Lys	Glu	Ser
	115						120					125			
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	130					135					140				
Glu	Phe	Met	Lys	Ser	Trp	Asn	Asp	Cys	Leu	Asn	Lys	Glu	Gly	Phe	Asp
145					150					155					160
Lys	Ile	Asp	Ile	Ser	Ala	Val	Val	Ala	Tyr	Thr	Ile	Ala	Val	Lys	Glu
				165					170					175	
Asp	Gly	Glu	Leu	Asn	Leu	Met	Lys	Lys	Ala	Ala	Ser	Ile	Thr	Ser	Glu
			180					185					190		
Val	Phe	Asn	Lys	Phe	Phe	Lys	Glu	Arg	Val	Met	Glu	Ile	Val	Asp	Ala
	195						200					205			
Asp	Glu	Lys	Val	Arg	His	Ser	Lys	Leu	Ala	Glu	Ser	Val	Glu	Lys	Ala
	210				215						220				
Ile	Glu	Glu	Lys	Lys	Tyr	Leu	Ala	Gly	Ala	Asp	Pro	Ser	Thr	Val	Glu
225					230					235					240
Met	Cys	Tyr	Pro	Pro	Ile	Ile	Gln	Ser	Gly	Gly	Asn	Tyr	Asn	Leu	Lys
				245					250					255	
Phe	Ser	Val	Val	Ser	Asp	Lys	Asn	His	Met	His	Phe	Gly	Ala	Ile	Thr
			260					265					270		
Cys	Ala	Met	Gly	Ile	Arg	Phe	Lys	Ser	Tyr	Cys	Ser	Asn	Leu	Val	Arg
	275						280					285			
Thr	Leu	Met	Val	Asp	Pro	Ser	Gln	Glu	Val	Gln	Glu	Asn	Tyr	Asn	Phe
	290					295					300				
Leu	Leu	Gln	Leu	Gln	Glu	Leu	Leu	Lys	Glu	Leu	Arg	His	Gly	Val	
305					310					315				320	
Lys	Ile	Cys	Asp	Val	Tyr	Asn	Ala	Val	Met	Asp	Val	Val	Lys	Lys	Gln
				325					330					335	
Lys	Pro	Glu	Leu	Leu	Asn	Lys	Ile	Thr	Lys	Asn	Leu	Gly	Phe	Gly	Met
			340					345					350		
Gly	Ile	Glu	Phe	Arg	Glu	Gly	Ser	Leu	Val	Ile	Asn	Ser	Lys	Asn	Gln
	355					360					365				
Tyr	Lys	Leu	Lys	Lys	Gly	Met	Val	Phe	Ser	Ile	Asn	Leu	Gly	Phe	Ser
	370					375					380				
Asp	Leu	Thr	Asn	Lys	Glu	Gly	Lys	Lys	Pro	Glu	Glu	Lys	Thr	Tyr	Ala
385					390					395					400
Leu	Phe	Ile	Gly	Asp	Thr	Val	Leu	Val	Asp	Glu	Asp	Gly	Pro	Ala	Thr
				405					410					415	
Val	Leu	Thr	Ser	Val	Lys	Lys	Lys	Val	Lys	Asn	Val	Gly	Ile	Phe	Leu
			420					425					430		
Lys	Asn	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu	Lys	Asp	Glu	Ala	Glu	
	435					440					445				
Asp	Leu	Leu	Gly	Arg	Gly	Ser	Arg	Ala	Ala	Leu	Leu	Thr	Glu	Arg	Thr
	450					455					460				
Arg	Asn	Glu	Met	Thr	Ala	Glu	Glu	Lys	Arg	Arg	Ala	His	Gln	Lys	Glu
465					470					475					480
Leu	Ala	Ala	Gln	Leu	Asn	Glu	Glu	Ala	Lys	Arg	Arg	Leu	Thr	Glu	Gln
				485				490					495		
Lys	Gly	Glu	Gln	Gln	Ile	Gln	Lys	Ala	Arg	Lys	Ser	Asn	Val	Ser	Tyr

500						505						510					
Lys	Asn	Pro	Ser	Leu	Met	Pro	Lys	Glu	Pro	His	Ile	Arg	Glu	Met	Lys		
515						520						525					
Ile	Tyr	Ile	Asp	Lys	Lys	Tyr	Glu	Thr	Val	Ile	Met	Pro	Val	Phe	Gly		
530						535						540					
Ile	Ala	Thr	Pro	Phe	His	Ile	Ala	Thr	Ile	Lys	Asn	Ile	Ser	Met	Ser		
545						550						555					
Val	Glu	Gly	Asp	Tyr	Thr	Tyr	Leu	Arg	Ile	Asn	Phe	Tyr	Cys	Pro	Gly		
565						570						575					
Ser	Ala	Leu	Gly	Arg	Asn	Glu	Gly	Asn	Ile	Phe	Pro	Asn	Pro	Glu	Ala		
580						585						590					
Thr	Phe	Val	Lys	Glu	Ile	Thr	Tyr	Arg	Ala	Ser	Asn	Ile	Lys	Ala	Pro		
595						600						605					
Gly	Glu	Gln	Thr	Val	Pro	Ala	Leu	Asn	Leu	Gln	Asn	Ala	Phe	Arg	Ile		
610						615						620					
Ile	Lys	Glu	Val	Gln	Lys	Arg	Tyr	Lys	Thr	Arg	Glu	Ala	Glu	Glu	Lys		
625						630						635					
Glu	Lys	Glu	Gly	Ile	Val	Lys	Gln	Asp	Ser	Leu	Val	Ile	Asn	Leu	Asn		
645						650						655					
Arg	Ser	Asn	Pro	Lys	Leu	Lys	Asp	Leu	Tyr	Ile	Arg	Pro	Asn	Ile	Ala		
660						665						670					
Gln	Lys	Arg	Met	Gln	Gly	Ser	Leu	Glu	Ala	His	Val	Asn	Gly	Phe	Arg		
675						680						685					
Phe	Thr	Ser	Val	Arg	Gly	Asp	Lys	Val	Asp	Ile	Leu	Tyr	Asn	Asn	Ile		
690						695						700					
Lys	His	Ala	Leu	Phe	Gln	Pro	Cys	Asp	Gly	Glu	Met	Ile	Ile	Val	Leu		
705						710						715					
His	Phe	His	Leu	Lys	Asn	Ala	Ile	Met	Phe	Gly	Lys	Lys	Arg	His	Thr		
725						730						735					
Asp	Val	Gln	Phe	Tyr	Thr	Glu	Val	Gly	Glu	Ile	Thr	Thr	Asp	Leu	Gly		
740						745						750					
Lys	His	Gln	His	Met	His	Asp	Arg	Asp	Asp	Leu	Tyr	Ala	Glu	Gln	Met		
755						760						765					
Glu	Arg	Glu	Met	Arg	His	Lys	Leu	Lys	Thr	Ala	Phe	Lys	Asn	Phe	Ile		
770						775						780					
Glu	Lys	Val	Glu	Ala	Leu	Thr	Lys	Glu	Glu	Leu	Glu	Phe	Glu	Val	Pro		
785						790						795					
Phe	Arg	Asp	Leu	Gly	Phe	Asn	Gly	Ala	Pro	Tyr	Arg	Ser	Thr	Cys	Leu		
805						810						815					
Leu	Gln	Pro	Thr	Ser	Ser	Ala	Leu	Val	Asn	Ala	Thr	Glu	Trp	Pro	Pro		
820						825						830					
Phe	Val	Val	Thr	Leu	Asp	Glu	Val	Glu	Leu	Ile	His	Phe	Glu	Arg	Val		
835						840						845					
Gln	Phe	His	Leu	Lys	Asn	Phe	Asp	Met	Val	Ile	Val	Tyr	Lys	Asp	Tyr		
850						855						860					
Ser	Lys	Lys	Val	Thr	Met	Ile	Asn	Ala	Ile	Pro	Val	Ala	Ser	Leu	Asp		
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Pro	Ile	Lys	Glu	Trp	Leu	Asn	Ser	Cys	Asp	Leu	Lys	Tyr	Thr	Glu	Gly		
885						890						895					
Val	Gln	Ser	Leu	Asn	Trp	Thr	Lys	Ile	Met	Lys	Thr	Ile	Val	Asp	Asp		
900						905						910					
Pro	Glu	Gly	Phe	Phe	Glu	Gln	Gly	Gly	Trp	Ser	Phe	Leu	Glu	Pro	Glu		
915						920						925					
Gly	Glu	Gly	Ser	Asp	Ala	Glu	Glu	Gly	Asp	Ser	Glu	Ser	Glu	Ile	Glu		

930                      935                      940  
 Asp Glu Thr Phe Asn Pro Ser Glu Asp Asp Tyr Glu Glu Glu Glu  
 945                      950                      955                      960  
 Asp Ser Asp Glu Asp Tyr Ser Ser Glu Ala Glu Glu Ser Asp Tyr Ser  
                     965                      970                      975  
 Lys Glu Ser Leu Gly Ser Glu Glu Glu Ser Gly Lys Asp Trp Asp Glu  
                     980                      985                      990  
 Leu Glu Glu Glu Ala Arg Lys Ala Asp Arg Glu Ser Arg Tyr Glu Glu  
                     995                      1000                      1005  
 Glu Glu Glu Gln Ser Arg Ser Met Ser Arg Lys Arg Lys Ala Ser Val  
                     1010                      1015                      1020  
 His Ser Ser Gly Arg Gly Ser Asn Arg Gly Ser Arg His Ser Ser Ala  
 1025                      1030                      1035                      1040  
 Pro Pro Lys Lys Lys Arg Lys  
                     1045

&lt;210&gt; 2959

&lt;211&gt; 3323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2959

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 180  
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2340  
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2580

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 3300  
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 3323

&lt;210&gt; 2960

&lt;211&gt; 868

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2960

Met	Ala	Thr	Phe	Ile	Ser	Val	Gln	Leu	Lys	Lys	Thr	Ser	Glu	Val	Asp
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Leu	Ala	Lys	Pro	Leu	Val	Lys	Phe	Ile	Gln	Gln	Thr	Tyr	Pro	Ser	Gly
		20					25						30		
Gly	Glu	Glu	Gln	Ala	Gln	Tyr	Cys	Arg	Ala	Ala	Glu	Glu	Leu	Ser	Lys
	35						40					45			
Leu	Arg	Arg	Ala	Ala	Val	Gly	Arg	Pro	Leu	Asp	Lys	His	Glu	Gly	Ala
	50					55				60					
Leu	Glu	Thr	Leu	Leu	Arg	Tyr	Tyr	Asp	Gln	Ile	Cys	Ser	Ile	Glu	Pro
65					70					75				80	
Lys	Phe	Pro	Phe	Ser	Glu	Asn	Gln	Ile	Cys	Leu	Thr	Phe	Thr	Trp	Lys
			85					90						95	
Asp	Ala	Phe	Asp	Lys	Gly	Ser	Leu	Phe	Gly	Gly	Ser	Val	Lys	Leu	Ala
		100					105						110		
Leu	Ala	Ser	Leu	Gly	Tyr	Glu	Lys	Ser	Cys	Val	Leu	Phe	Asn	Cys	Ala
	115						120					125			
Ala	Leu	Ala	Ser	Gln	Ile	Ala	Ala	Glu	Gln	Asn	Leu	Asp	Asn	Asp	Glu
	130					135					140				
Gly	Leu	Lys	Ile	Ala	Ala	Lys	His	Tyr	Gln	Phe	Ala	Ser	Gly	Ala	Phe
145					150					155				160	
Leu	His	Ile	Lys	Glu	Thr	Val	Leu	Ser	Ala	Leu	Ser	Arg	Glu	Pro	Thr





595                      600                      605  
 Gly Gly Leu Thr Thr Lys Val Gln Glu Ser Leu Lys Lys Gln Glu Gly  
 610                      615                      620  
 Leu Leu Lys Asn Ile Gln Val Ser His Gln Glu Phe Ser Lys Met Lys  
 625                      630                      635                      640  
 Gln Ser Asn Asn Glu Ala Asn Leu Arg Glu Glu Val Leu Lys Asn Leu  
 645                      650                      655  
 Ala Thr Ala Tyr Asp Asn Phe Val Glu Leu Val Ala Asn Leu Lys Glu  
 660                      665                      670  
 Gly Thr Lys Phe Tyr Asn Glu Leu Thr Glu Ile Leu Val Arg Phe Gln  
 675                      680                      685  
 Asn Lys Cys Ser Asp Ile Val Phe Ala Arg Lys Thr Glu Arg Asp Glu  
 690                      695                      700  
 Leu Leu Lys Asp Leu Gln Gln Ser Ile Ala Arg Glu Pro Ser Ala Pro  
 705                      710                      715                      720  
 Ser Ile Pro Thr Pro Ala Tyr Gln Ser Leu Pro Ala Gly Gly His Ala  
 725                      730                      735  
 Pro Thr Pro Pro Thr Pro Ala Pro Arg Thr Met Pro Pro Thr Lys Pro  
 740                      745                      750  
 Gln Pro Pro Ala Arg Pro Pro Pro Val Leu Pro Ala Asn Arg Ala  
 755                      760                      765  
 Pro Ser Ala Thr Ala Pro Ser Pro Val Gly Ala Gly Thr Ala Ala Pro  
 770                      775                      780  
 Ala Pro Ser Gln Thr Pro Gly Ser Ala Pro Pro Pro Gln Ala Gln Gly  
 785                      790                      795                      800  
 Pro Pro Tyr Pro Thr Tyr Pro Gly Tyr Pro Gly Tyr Cys Gln Met Pro  
 805                      810                      815  
 Met Pro Met Gly Tyr Asn Pro Tyr Ala Tyr Gly Gln Tyr Asn Met Pro  
 820                      825                      830  
 Tyr Pro Pro Val Tyr His Gln Ser Pro Gly Gln Ala Pro Tyr Pro Gly  
 835                      840                      845  
 Pro Gln Gln Pro Ser Tyr Pro Phe Pro Gln Pro Pro Gln Gln Ser Tyr  
 850                      855                      860  
 Tyr Pro Gln Gln  
 865

&lt;210&gt; 2961

&lt;211&gt; 434

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2961

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 ccgctgctgt gggccccggc tgcgggtccgg gccggcccag atgaagacct tagcnaccgg  
 120  
 aacaaagaac cgccggcgcc ggcccagcag ctgcagccgc agcctgtggc tgtgcagggc  
 180  
 cccgagccgg cccgggtcga ggctaatttt tgtatttttt ttgtagagac aggatttcgc  
 240  
 catgttgacc agtgggtctca agctcctggg ctcaagtaat ccgcccgaact cggctctccca  
 300  
 aagtgtctggg attacaggca tgagccaccg tgcttgccca gattttgttt ggctatgcc  
 360

ccacagtcac cccaggggtc tatacatact atgtttcaac tgtattatgt gccatttttg  
420

gcattagaat gcat  
434

<210> 2962

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2962

Ala	Ala	Ala	Pro	Gly	Asn	Gly	Arg	Ala	Ser	Ala	Pro	Arg	Leu	Leu	Leu
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Leu	Phe	Leu	Val	Pro	Leu	Leu	Trp	Ala	Pro	Ala	Ala	Val	Arg	Ala	Gly
			20					25					30		
Pro	Asp	Glu	Asp	Leu	Ser	Xaa	Arg	Asn	Lys	Glu	Pro	Pro	Ala	Pro	Ala
		35					40					45			
Gln	Gln	Leu	Gln	Pro	Gln	Pro	Val	Ala	Val	Gln	Gly	Pro	Glu	Pro	Ala
		50				55					60				
Arg	Val	Glu	Ala	Asn	Phe	Cys	Ile	Phe	Phe	Val	Glu	Thr	Gly	Phe	Arg
65				70				75						80	
His	Val	Asp	Gln	Trp	Ser	Gln	Ala	Pro	Gly	Leu	Lys				
				85				90							

<210> 2963

<211> 567

<212> DNA

<213> Homo sapiens

<400> 2963

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120  
acgtcctgc tgcttttctt gaaccccgag caaagcacca ccttgccgca gagcaccac  
180  
tccctagcag ctgccccac aggggtgctg ggacccaact gagctggtga ccagcctccc  
240  
ccgcccacag caatatgcca gccgccatgc cggaacggag ggagctgtgt ccagcctggc  
300  
cgctgccgt gccctgcagg atggcggggg gacacttgc agtcaggtga ggctggctct  
360  
accctggggg gccctggaag ggtctggggc acctctttgc atgtcgtggg gttactgatg  
420  
gtccatgagt ggggtggtgt gaaggagct gtgtgggcag gaccctccc gcaggcatgg  
480  
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540  
ccccagcgt gtgtccccc cgcgggt  
567

<210> 2964

<211> 115

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2964

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 20 25 30  
 Gly Trp Arg Gly Asp Thr Cys Gln Ser Gly Glu Ala Gly Ser Thr Leu  
 35 40 45  
 Gly Gly Pro Gly Arg Val Trp Gly Thr Ser Leu His Val Val Gly Leu  
 50 55 60  
 Leu Met Val His Glu Trp Val Val Val Lys Gly Ala Val Trp Ala Gly  
 65 70 75 80  
 Pro Leu Pro Gln Ala Trp Pro Pro Asp Thr Pro Phe Pro Ala Asp Val  
 85 90 95  
 Asp Glu Cys Ser Asp Arg Arg Gly Gly Cys Pro Gln Arg Cys Val His  
 100 105 110  
 Pro Ala Gly  
 115

&lt;210&gt; 2965

&lt;211&gt; 3739

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2965

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 tccagctcag cctgggacag ctggttgaac tggagccggt ctccgcctat cccaactgtt  
 120  
 ggacgtcgaa caattgcata gccgttctcg tagctcagcg tctgacttct gtggaaggct  
 180  
 gttttcgtag agtccttaaa ggacgtgccc ggaagaaagg gcaagccatg cacgggattg  
 240  
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 300  
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 360  
 caggacctag gtggcggcgg tggtagccgc tgcaatggtg tccaatcccg tgcattgctt  
 420  
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 480  
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 660  
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 720  
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 780  
 cagcatgtct gtcatagagc ctgtttaga aaattctgga atccttcaag gcaagttaat  
 840

aaaacgccag cggctagcca agaatgaccg gggtagccat taccattgga aagacctaaa  
900  
tcgaggaata aacatcacaa tttatggcaa aactttccgc gttgttgact gtgaccaatt  
960  
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&lt;210&gt; 2966

&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2966

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Glu Asn Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln					
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Glu Val Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser					
65		70		75	80
Leu Thr Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe					
	85		90		95
Thr Arg Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg					
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Ile Asp Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro					
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Pro Tyr Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe					
	130		135		140
Ala Leu Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val					
	145		150		155
Asn Asp Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile					
	165		170		175
Pro Glu Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr					
	180		185		190
Asp Met Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile					
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Gly Gly Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr					
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Val Ile Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu					
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Tyr Val Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu					
	260		265		270
Ala Leu Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala					
	275		280		285
Pro Glu Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu					
	290		295		300
Leu Glu Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser					
	305		310		315
Cys Lys Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala					
	325		330		335
Ser Gly Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu					
	340		345		350
Asn Val Pro Val Asp Asp Ser Leu Val Lys Glu Leu Leu Arg Met Cys					
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Ser His Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe					
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Ser Asn					
385					

&lt;210&gt; 2967

&lt;211&gt; 1103

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2967

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&lt;210&gt; 2968

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2968

Ala	Ala	Gly	Gly	Gly	Arg	Arg	Ser	Arg	Leu	Ser	Arg	Ser	Trp	Pro	Thr
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Gly	Pro	Ser	Lys	Ser	Pro	Ser	Gly	Val	Arg	Cys	Cys	Gly	Ala	Ala	Ala
			20					25					30		
Trp	Glu	Asp	Lys	Asp	Glu	Phe	Leu	Asp	Val	Ile	Tyr	Trp	Phe	Arg	Gln
		35					40					45			
Ile	Ile	Ala	Val	Val	Leu	Gly	Val	Ile	Trp	Gly	Val	Leu	Pro	Leu	Arg
	50					55				60					
Gly	Phe	Leu	Gly	Ile	Ala	Gly	Phe	Cys	Leu	Ile	Asn	Ala	Gly	Val	Leu



65		70		75		80									
Tyr	Leu	Tyr	Phe	Ser	Asn	Tyr	Leu	Gln	Ile	Asp	Glu	Glu	Glu	Tyr	Gly
		85						90					95		
Gly	Thr	Trp	Glu	Leu	Thr	Lys	Glu	Gly	Phe	Met	Thr	Ser	Phe	Ala	Xaa
		100					105					110			
Val	His	Gly	His	Leu	Asp	His	Leu	Leu	His	Cys	His	Pro	Leu		
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&lt;210&gt; 2969

&lt;211&gt; 667

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2969

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gggggca
667

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&lt;210&gt; 2970

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2970

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Arg	Asp	Ser	Lys	Leu	Thr	Arg	Leu	Leu	Gln	Asp	Ser	Leu	Gly	Gly	Asn
		20					25					30			
Ser	Gln	Thr	Ile	Met	Ile	Ala	Trp	Gly	Ser	Pro	Ser	Asn	Arg	Asp	Phe
	35					40					45				
Met	Glu	Thr	Leu	Asn	Thr	Leu	Lys	Tyr	Ala	Asn	Arg	Ala	Arg	Asn	Ile
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<210> 2971
<211> 6015
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 2972

&lt;211&gt; 632

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2972

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          35           40           45
Arg Glu Val Lys Ser Leu Lys Lys Leu Asn His Ala Asn Val Val Lys
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Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu
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Tyr Met Lys Glu Asn Leu Tyr Gln Leu Ile Lys Glu Arg Asn Lys Leu
          85          90          95
Phe Pro Glu Ser Ala Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly
          100          105          110
Leu Ala Phe Ile His Lys His Gly Phe Phe His Arg Asp Leu Lys Pro
          115          120          125
Glu Asn Leu Leu Cys Met Gly Pro Glu Leu Val Lys Ile Ala Asp Phe
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Gly Leu Ala Arg Glu Ile Arg Ser Lys Pro Pro Tyr Thr Asp Tyr Val
145          150          155          160
Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Thr Asn
          165          170          175
Tyr Ser Ser Pro Ile Asp Val Trp Ala Val Gly Cys Ile Met Ala Glu
          180          185          190
Val Tyr Thr Leu Arg Pro Leu Phe Pro Gly Ala Ser Glu Ile Asp Thr
          195          200          205
Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Thr Asp Trp
          210          215          220
Pro Glu Gly Tyr Gln Leu Ser Ser Ala Met Asn Phe Arg Trp Pro Gln
225          230          235          240
Cys Val Pro Asn Asn Leu Lys Thr Leu Ile Pro Asn Ala Ser Ser Glu
          245          250          255
Ala Val Gln Leu Leu Arg Asp Met Leu Gln Trp Asp Pro Lys Lys Arg
          260          265          270
Pro Thr Ala Ser Gln Ala Leu Arg Tyr Pro Tyr Phe Gln Val Gly His
          275          280          285
Pro Leu Gly Ser Thr Thr Gln Asn Leu Gln Asp Ser Glu Lys Pro Gln
          290          295          300
Lys Gly Ile Leu Glu Lys Ala Gly Pro Pro Pro Tyr Ile Lys Pro Val
305          310          315          320
Pro Pro Ala Gln Pro Pro Ala Lys Pro His Thr Arg Ile Ser Ser Arg
          325          330          335
Gln His Gln Ala Ser Gln Pro Pro Leu His Leu Thr Tyr Pro Tyr Lys
          340          345          350
Ala Glu Val Ser Arg Thr Asp His Pro Ser His Leu Gln Glu Asp Lys
          355          360          365
Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser
          370          375          380
Lys Ile Thr Ala Gly Leu Glu His Lys Asn Gly Glu Ile Lys Pro Lys
385          390          395          400
Ser Arg Arg Arg Trp Gly Leu Ile Ser Arg Ser Thr Lys Asp Ser Asp

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405 410 415  
 Asp Trp Ala Asp Leu Asp Asp Leu Asp Phe Ser Pro Ser Leu Ser Arg  
 420 425 430  
 Ile Asp Leu Lys Asn Lys Lys Arg Gln Ser Asp Asp Thr Leu Cys Arg  
 435 440 445  
 Phe Glu Ser Val Leu Asp Leu Lys Pro Ser Glu Pro Val Gly Thr Gly  
 450 455 460  
 Asn Ser Ala Pro Thr Gln Thr Ser Tyr Gln Arg Arg Asp Thr Pro Thr  
 465 470 475 480  
 Leu Arg Ser Ala Ala Lys Gln His Tyr Leu Lys His Ser Arg Tyr Leu  
 485 490 495  
 Pro Gly Ile Ser Ile Arg Asn Gly Ile Leu Ser Asn Pro Gly Lys Glu  
 500 505 510  
 Phe Ile Pro Pro Asn Pro Trp Ser Ser Ser Gly Leu Ser Gly Lys Ser  
 515 520 525  
 Ser Gly Thr Met Ser Val Ile Ser Lys Val Asn Ser Val Gly Ser Ser  
 530 535 540  
 Ser Thr Ser Ser Ser Gly Leu Thr Gly Asn Tyr Val Pro Ser Phe Leu  
 545 550 555 560  
 Lys Lys Glu Ile Gly Ser Ala Met Gln Arg Val His Leu Ala Pro Ile  
 565 570 575  
 Pro Asp Pro Ser Pro Gly Tyr Ser Ser Leu Lys Ala Met Arg Pro His  
 580 585 590  
 Pro Gly Arg Pro Phe Phe His Thr Gln Pro Arg Ser Thr Pro Gly Leu  
 595 600 605  
 Ile Pro Arg Pro Pro Ala Ala Gln Pro Val His Gly Arg Thr Asp Trp  
 610 615 620  
 Ala Ser Lys Tyr Ala Ser Arg Arg  
 625 630

&lt;210&gt; 2973

&lt;211&gt; 858

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2973

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 gggcctgttg aagtggaaaag tgccttgga gagcatcctg ctgtcctgga gtcggctgtg  
 120  
 gtcagcagcc cagaccccat caggggagag gtggtaaagg catttatagt ccttactcca  
 180  
 gcctactcct ctcatgacct agaggcacta acgcgggaac tccaggagca tgtgaaaagg  
 240  
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 300  
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 420  
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 480  
 acggcatccc caggatcact gggcaatgct ggaaagagca aaagaatatc attggccctg  
 540

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 660  
 gacaggttac catagacttg gggcacttgt ggggtactcat tttctgccag tgggaatgta  
 720  
 aaggcttcat cctttgtatg taaccatttg gcaaaagtat gcaggaacat aaaataaaat  
 780  
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 840  
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 858

<210> 2974

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2974

Gly	Tyr	Phe	Trp	Phe	Met	Gly	Arg	Thr	Asp	Asp	Val	Ile	Asn	Ser	Ser
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Ser	Tyr	Arg	Ile	Gly	Pro	Val	Glu	Val	Glu	Ser	Ala	Leu	Ala	Glu	His
			20					25					30		
Pro	Ala	Val	Leu	Glu	Ser	Ala	Val	Val	Ser	Ser	Pro	Asp	Pro	Ile	Arg
		35					40				45				
Gly	Glu	Val	Val	Lys	Ala	Phe	Ile	Val	Leu	Thr	Pro	Ala	Tyr	Ser	Ser
	50					55				60					
His	Asp	Pro	Glu	Ala	Leu	Thr	Arg	Glu	Leu	Gln	Glu	His	Val	Lys	Arg
65					70				75					80	
Val	Thr	Ala	Pro	Tyr	Lys	Thr	Pro	Arg	Lys	Val	Ala	Phe	Val	Ser	Glu
			85					90					95		
Leu	Pro	Lys	Thr	Val	Ser	Gly	Lys	Ile	Gln	Arg	Ser	Lys	Leu	Arg	Ser
		100					105						110		
Gln	Glu	Trp	Gly	Lys											
		115													

<210> 2975

<211> 1425

<212> DNA

<213> Homo sapiens

<400> 2975

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 120  
 acaccagaat ccagccaga tactccgcct ggcacccctc tgggtgtcca agatgagaag  
 180  
 agagatgctg agctgccgaa gaagcgtatg gggaagtcaa accccggctg ggagaacttg  
 240  
 gagaagttgc tagtggtcac cgcagctggg gtgaaaccgg ggnncaaggt ggctggcttt  
 300  
 gatctggacg ggacgctcat caccacacgc tctgggaagg tctttccac tggccccagt  
 360



gactggagga tcttgtaccc agagattccc cgtaagctcc gagagctgga agccgagggc  
 420  
 tacaagctgg tgatcttcac caaccagatg agcatcgggc gcgggaagct gccagccgag  
 480  
 gagttcaagg ccaaggtgga ggctgtggtg gagaagctgg ggggtccctt ccaggtgctg  
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 660  
 gccggacgcc cggccaactg ggccccgggg cggaagaaga aagacttctc ctgcgccgat  
 720  
 cgctgtttg cctcaacct tggcctgccc ttcgccacgc ctgaggagtt ctttctcaag  
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 960  
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 1020  
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 1080  
 gcgccaggta cgtccagtgt gcccgagccg cgggcgtccc ctgccgtgc ttcctctca  
 1140  
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 1200  
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 1260  
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 1320  
 tggggcggtt gtactgccag ttctccgagg gctgagcccg ccagctccc ctccacaata  
 1380  
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 1425

&lt;210&gt; 2976

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2976

Pro	Ser	Thr	Thr	Gly	Thr	Gln	Glu	Leu	Lys	Pro	Gly	Leu	Glu	Gly	Ser
1				5					10					15	
Leu	Gly	Val	Gly	Asp	Thr	Met	Tyr	Thr	Val	Asn	Gly	Val	His	Pro	Leu
		20						25					30		
Thr	Leu	Arg	Trp	Glu	Glu	Thr	Arg	Thr	Pro	Glu	Ser	Gln	Pro	Asp	Thr
		35					40					45			
Pro	Pro	Gly	Thr	Pro	Leu	Val	Ser	Gln	Asp	Glu	Lys	Arg	Asp	Ala	Glu
		50				55				60					
Leu	Pro	Lys	Lys	Arg	Met	Gly	Lys	Ser	Asn	Pro	Gly	Trp	Glu	Asn	Leu
65				70					75				80		
Glu	Lys	Leu	Leu	Val	Phe	Thr	Ala	Ala	Gly	Val	Lys	Pro	Gly	Xaa	Lys

	85		90		95										
Val	Ala	Gly	Phe	Asp	Leu	Asp	Gly	Thr	Leu	Ile	Thr	Thr	Arg	Ser	Gly
	100						105						110		
Lys	Val	Phe	Pro	Thr	Gly	Pro	Ser	Asp	Trp	Arg	Ile	Leu	Tyr	Pro	Glu
	115						120					125			
Ile	Pro	Arg	Lys	Leu	Arg	Glu	Leu	Glu	Ala	Glu	Gly	Tyr	Lys	Leu	Val
	130					135					140				
Ile	Phe	Thr	Asn	Gln	Met	Ser	Ile	Gly	Arg	Gly	Lys	Leu	Pro	Ala	Glu
145				150					155				160		
Glu	Phe	Lys	Ala	Lys	Val	Glu	Ala	Val	Val	Glu	Lys	Leu	Gly	Val	Pro
			165					170				175			
Phe	Gln	Val	Leu	Val	Ala	Thr	His	Ala	Gly	Leu	Tyr	Arg	Lys	Pro	Val
	180						185					190			
Thr	Gly	Met	Trp	Asp	His	Leu	Gln	Glu	Ala	Asn	Asp	Gly	Thr	Pro	
	195					200				205					
Ile	Ser	Ile	Gly	Asp	Ser	Ile	Phe	Val	Gly	Asp	Ala	Ala	Gly	Arg	Pro
	210				215					220					
Ala	Asn	Trp	Ala	Pro	Gly	Arg	Lys	Lys	Lys	Asp	Phe	Ser	Cys	Ala	Asp
225				230					235				240		
Arg	Leu	Phe	Ala	Leu	Asn	Leu	Gly	Leu	Pro	Phe	Ala	Thr	Pro	Glu	Glu
			245					250					255		
Phe	Phe	Leu	Lys	Trp	Pro	Ala	Ala	Gly	Phe	Glu	Leu	Pro	Ala	Phe	Asp
	260						265				270				
Pro	Arg	Thr	Val	Ser	Arg	Ser	Gly	Pro	Leu	Cys	Leu	Pro	Glu	Ser	Arg
	275					280					285				
Ala	Leu	Leu	Ser	Ala	Ser	Pro	Glu	Val	Val	Val	Ala	Val	Gly	Phe	Pro
	290				295					300					
Gly	Ala	Gly	Lys	Ser	Thr	Phe	Leu	Lys	Lys	His	Leu	Val	Ser	Ala	Gly
305				310				315				320			
Tyr	Val	His	Val	Thr	Gly	Thr	Arg								
			325												

&lt;210&gt; 2977

&lt;211&gt; 1420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2977

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 60  
 ggcacctacc actgcactgc cgctgagtgg attcaggatc ctgatggcag ctgggccag  
 120  
 attgcagaga aaagggccgt cctggccac gtggatgtgc agacgtgtc cagccagctg  
 180  
 gcagtgcag tggggcctgg tgaacgtcg atcgccagc gggagccctt ggaactgctg  
 240  
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 300  
 gagatggcac ctgcgggggc acctgggccc ggccgctgg tagccagct ggacacagag  
 360  
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 420  
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 480

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 660  
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 720  
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 780  
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 840  
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 900  
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 1140  
 cttttcaggt cttgcaggtg tcgactgtct tccggcccag ctccaagccc tcctctggtt  
 1200  
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 1260  
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 1320  
 ttctgttctt gatctcttag ggatcctata gggaggccat ttctgtcct ggaattagtt  
 1380  
 tttctaaaat gtgaataaac ttgttttata aaaagcaaaa  
 1420

&lt;210&gt; 2978

&lt;211&gt; 369

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2978

Xaa	Ser	Asn	Ile	His	Ala	Glu	Tyr	Arg	Met	Val	Val	Gly	Gly	Ala	Gln
1				5					10					15	
Ala	Gly	Asp	Ala	Gly	Thr	Tyr	His	Cys	Thr	Ala	Ala	Glu	Trp	Ile	Gln
		20						25				30			
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
		35				40					45				
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
	50				55					60					
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65				70					75					80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
			85						90				95		
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
			100					105				110			
Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

115	120	125
Ala Met Arg Ala Asp Xaa Ile Ala Met Glu Lys Val Ala Ser Arg Thr		
130	135	140
Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp Ala Gly Thr Tyr		
145	150	155
Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg		
165	170	175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu		
180	185	190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val		
195	200	205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly		
210	215	220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro		
225	230	235
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val		
245	250	255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro		
260	265	270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His		
275	280	285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala		
290	295	300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg		
305	310	315
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu		
325	330	335
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala		
340	345	350
Thr Val Leu Gly Thr Ile Thr Cys Cys Phe Met Lys Arg Leu Arg Lys		
355	360	365

Arg

&lt;210&gt; 2979

&lt;211&gt; 2191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2979

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120
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180
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240
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420

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660  
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780  
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1680  
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1920  
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1980  
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 2100  
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 2191

<210> 2980

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2980

Met	Gly	Thr	Gly	His	Arg	Ala	Arg	Ala	Tyr	Asn	Gly	Tyr	Ala	Thr	Trp
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Leu	Leu	Val	Gly	Pro	Leu	Gln	Pro	Val	Gly	Lys	Pro	Ala	Arg	Leu	Leu
		20						25					30		
Gly	Thr	Glu	His	Gly	Gln	Pro	Phe	Ala	Arg	Gly	Trp	Gly	Ala	Trp	Gly
		35					40					45			
Asn	Ala	Arg	Arg	Ala	Arg	Val	Gly	Arg	Ala	Glu	Cys	Leu	Leu	Ser	Gly
	50					55				60					
Arg	Pro	Pro	Thr	Ala	Val	Leu	Pro	Arg	Leu	Val	Glu	Asn	Leu	Lys	Ala
65					70					75				80	
Arg	Val	Pro	Val	Pro	Gly	His	Thr	Glu	Pro	Leu	Trp	Ser	Glu	Gly	Thr
			85					90						95	
Ala	Pro	Gly	Gln	Gly	Leu	Trp	Ser	His	Ala	Pro	Ala	Asp	Gly	Ser	Leu
		100						105					110		
Met	Asn	Leu	Ile	Arg	Thr	Leu	Val	Gly	Ala	Val	Val	Phe	Glu	Leu	Leu
	115					120						125			
Ser	Met	Cys	Phe	Gly	Asp	Gly	Ala	Gly	Ala	Ala	Cys				
	130					135					140				

<210> 2981

<211> 617

<212> DNA

<213> Homo sapiens

<400> 2981

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 120  
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 240  
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 360  
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<210> 2982

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2982

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His	Ser	Ser	Ser	Ser	Glu	Glu	Ser	Thr	Lys	Arg	Thr	Ser	His	Ser	Lys
			35				40					45			
Leu	Pro	Glu	Gln	Glu	Ala	Ala	Glu	Ala	Asp	Leu	Ser	Asn	Met	Glu	Arg
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Val	Ser	Leu	Ser	Thr	Ala	Asp	Pro	Gln	Gly	Val	Thr	Tyr	Ala	Glu	Leu
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Ser	Thr	Ser	Ala	Leu	Ser	Glu	Ala	Ala	Ser	Asp	Thr	Thr	Gln	Glu	Pro
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<210> 2983

<211> 614

<212> DNA

<213> Homo sapiens

<400> 2983

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<210> 2984

<211> 204

<212> PRT

<213> Homo sapiens

<400> 2984

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Gly Ala Gly Arg Val Gly Lys Ser Ala Met Ile Val Arg Phe Leu Thr  
35 40 45  
Lys Arg Phe Ile Gly Asp Tyr Glu Pro Asn Thr Gly Lys Leu Tyr Ser  
50 55 60  
Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp  
65 70 75 80  
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp  
85 90 95  
Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser  
100 105 110  
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115 120 125  
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130 135 140  
Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly  
145 150 155 160  
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr  
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<210> 2985

<211> 4547

<212> DNA

<213> Homo sapiens

<400> 2985

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&lt;210&gt; 2986

&lt;211&gt; 988

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2986

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Gln	Glu	Val	Phe	Lys	Pro	Glu	Asn	Ile	Ser	Leu	Arg	Asn	Lys	Leu	Arg
				20				25					30		
Glu	Leu	Cys	Val	Lys	Leu	Met	Phe	Leu	His	Pro	Val	Asp	Tyr	Gly	Arg
				35				40					45		
Lys	Ala	Glu	Glu	Leu	Leu	Trp	Arg	Lys	Val	Tyr	Tyr	Glu	Val	Ile	Gln
				50				55				60			
Leu	Ile	Lys	Thr	Asn	Lys	Lys	His	Ile	His	Ser	Arg	Ser	Thr	Leu	Glu
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Cys	Ala	Tyr	Arg	Thr	His	Leu	Val	Ala	Gly	Ile	Gly	Phe	Tyr	Gln	His
				85				90						95	
Leu	Leu	Leu	Tyr	Ile	Gln	Ser	His	Tyr	Gln	Leu	Glu	Leu	Gln	Cys	Cys
				100				105					110		
Ile	Asp	Trp	Thr	His	Val	Thr	Asp	Pro	Leu	Ile	Gly	Cys	Lys	Lys	Pro

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Arg Cys Leu Val Tyr Leu Gly Asp Leu Ser Arg Tyr Gln Asn Glu Leu		
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Ala Gly Val Asp Thr Glu Leu Leu Ala Glu Arg Phe Tyr Tyr Gln Ala		
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Leu Ser Val Ala Pro Gln Ile Gly Met Pro Phe Asn Gln Leu Gly Thr		
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Leu Ala Gly Ser Lys Tyr Tyr Asn Val Glu Ala Met Tyr Cys Tyr Leu		
195	200	205
Arg Cys Ile Gln Ser Glu Val Ser Phe Glu Gly Ala Tyr Gly Asn Leu		
210	215	220
Lys Arg Leu Tyr Asp Lys Ala Ala Lys Met Tyr His Gln Leu Lys Lys		
225	230	235
Cys Glu Thr Arg Lys Leu Ser Pro Gly Lys Lys Arg Cys Lys Asp Ile		
245	250	255
Lys Arg Leu Leu Val Asn Phe Met Tyr Leu Gln Ser Leu Leu Gln Pro		
260	265	270
Lys Ser Ser Ser Val Asp Ser Glu Leu Thr Ser Leu Cys Gln Ser Val		
275	280	285
Leu Glu Asp Phe Asn Leu Cys Leu Phe Tyr Leu Pro Ser Ser Pro Asn		
290	295	300
Leu Ser Leu Ala Ser Glu Asp Glu Glu Glu Tyr Glu Ser Gly Tyr Ala		
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Phe Leu Pro Asp Leu Leu Ile Phe Gln Met Val Ile Ile Cys Leu Met		
325	330	335
Cys Val His Ser Leu Glu Arg Ala Gly Ser Lys Gln Tyr Ser Ala Ala		
340	345	350
Ile Ala Phe Thr Leu Ala Leu Phe Ser His Leu Val Asn His Val Asn		
355	360	365
Ile Arg Leu Gln Ala Glu Leu Glu Glu Gly Glu Asn Pro Val Pro Ala		
370	375	380
Phe Gln Ser Asp Gly Thr Asp Glu Pro Glu Ser Lys Glu Pro Val Glu		
385	390	395
Lys Glu Glu Glu Pro Asp Pro Glu Pro Pro Val Thr Pro Gln Val		
405	410	415
Gly Glu Gly Arg Lys Ser Arg Lys Phe Ser Arg Leu Ser Cys Leu Arg		
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Arg Arg Arg His Pro Pro Lys Val Gly Asp Asp Ser Asp Leu Ser Glu		
435	440	445
Gly Phe Glu Ser Asp Ser Ser His Asp Ser Ala Arg Ala Ser Glu Gly		
450	455	460
Ser Asp Ser Gly Ser Asp Lys Ser Leu Glu Gly Gly Gly Thr Ala Phe		
465	470	475
Asp Ala Glu Thr Asp Ser Glu Met Asn Ser Gln Glu Ser Arg Ser Asp		
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Leu Glu Asp Met Glu Glu Glu Gly Thr Arg Ser Pro Thr Leu Glu		
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Pro Pro Arg Gly Arg Ser Glu Ala Pro Asp Ser Leu Asn Gly Pro Leu		
515	520	525
Gly Pro Ser Glu Ala Ser Ile Ala Ser Asn Leu Gln Ala Met Ser Thr		
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Gln Met Phe Gln Thr Lys Arg Cys Phe Arg Leu Ala Pro Thr Phe Ser		

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Phe	Asp	Thr	Asp	Arg	Pro	Leu	Leu	Ser	Thr	Leu	Glu	Glu	Ser	Val
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Leu	Glu	Ala	Glu	Phe	Lys	Lys	Gly	Asn	Arg	Tyr	Ile	Arg	Cys	Gln
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Ile	Thr	Gly	Leu	Pro	Leu	Asp	Asn	Pro	Ser	Val	Leu	Ser	Gly	Pro
945				950					955					960
Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile	Lys
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980

985

&lt;210&gt; 2987

&lt;211&gt; 1016

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2987

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&lt;210&gt; 2988

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2988

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1185

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&lt;210&gt; 2990

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2990

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Met Phe Pro Val Phe Ser Gly Cys Phe Gln Glu Leu Gln Glu Lys Asn
 1           5           10          15
Lys Ser Leu Glu Leu Val Ser Phe Glu Glu Val Ala Val His Phe Thr
      20           25           30
Trp Glu Glu Trp Gln Asp Leu Asp Asp Ala Gln Arg Thr Leu Tyr Arg
      35           40           45
Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys
      50           55           60
Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro
      65           70           75           80
Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys
      85           90           95
Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln
      100          105          110
Glu Val

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&lt;210&gt; 2991

&lt;211&gt; 980

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2991

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720

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<210> 2992

<211> 64

<212> PRT

<213> Homo sapiens

<400> 2992

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His	Thr	Gly	Pro	Phe	Thr	Glu	Val	Ser	Pro	Gly	Ala	Leu	Gly	Trp	Pro
			20					25					30		
Val	Leu	Cys	Ser	Gly	Leu	Leu	Leu	Gly	Gly	Leu	Gly	Ala	Ala	His	Phe
		35					40				45				
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<210> 2993

<211> 687

<212> DNA

<213> Homo sapiens

<400> 2993

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687

<210> 2994

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2994

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Leu	Glu	Arg	Arg	Arg	Glu	Gln	Glu	Glu	Lys	Glu	Asp	Met	Glu	Thr	Gln
			20					25					30		
Ala	Val	Ala	Thr	Ser	Pro	Asp	Gly	Arg	Tyr	Leu	Lys	Phe	Asp	Ile	Glu
		35					40					45			
Ile	Gly	Arg	Gly	Ser	Phe	Lys	Thr	Val	Tyr	Arg	Gly	Leu	Asp	Thr	Asp
	50					55					60				
Thr	Thr	Val	Glu	Val	Ala	Trp	Cys	Glu	Leu	Gln	Thr	Arg	Lys	Leu	Ser
65					70					75				80	
Arg	Ala	Glu	Arg	Gln	Arg	Phe	Ser	Glu	Glu	Val	Glu	Met	Leu	Lys	Gly
				85					90					95	
Leu	Gln	His	Pro	Asn	Ile	Val	Arg	Phe	Tyr	Asp	Ser	Trp	Lys	Ser	Val
			100					105					110		
Leu	Arg	Gly	Gln	Val	Cys	Ile	Val	Leu	Val	Thr	Glu	Leu	Met	Thr	Ser
		115					120					125			
Gly	Thr	Leu	Lys	Thr	Tyr	Leu	Arg	Arg	Phe	Arg	Glu	Met	Lys	Pro	Arg
		130					135					140			
Val	Leu	Gln	Arg	Trp	Ser	Arg	Gln	Ile	Leu	Arg	Gly	Leu	His	Phe	Leu
145					150					155				160	
His	Ser	Arg	Val	Pro	Pro	Ile	Leu	His	Arg	Asp	Leu	Lys	Cys	Asp	Asn
				165					170					175	
Val	Phe	Ile	Thr	Gly	Pro	Thr	Gly	Ser	Val	Lys	Ile	Gly	Asp	Leu	Gly
		180					185						190		
Leu	Ala	Thr	Leu	Lys	Arg	Ala	Ser	Phe	Ala	Lys	Ser	Val	Ile	Gly	Thr
		195					200					205			
Pro	Glu	Phe	Met	Ala	Pro	Glu	Met	Tyr	Glu	Glu	Lys	Tyr	Asp	Glu	Ala
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Val	Asp	Val	Tyr	Ala											

225

<210> 2995

<211> 1879

<212> DNA

<213> Homo sapiens

<400> 2995

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300  
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1879

<210> 2996

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2996

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Ile	Phe	Thr	Leu	Leu	Leu	Leu	Leu	Phe	Leu	Arg	Trp	Ser	Leu	Thr	
			20				25					30			
Leu	Xaa	Thr	Gln	Ala	Gly	Ile	Gln	Trp	Cys	Asp	Leu	Ser	Ser	Leu	Gln
			35				40					45			
Pro	Pro	Pro	Pro	Arg	Phe	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser
			50			55					60				
Ser	Trp	Asp	Ser	Asp	Arg	Cys	Leu	Pro	Pro	His	Pro	Gly	Asp	Phe	Cys
65					70					75				80	
Ile	Phe	Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Cys	Ser	Gly	Trp	Ser	Arg
			85						90					95	
Thr	Pro	Asp	Leu	Lys											
															100

<210> 2997

<211> 800

<212> DNA

<213> Homo sapiens

<400> 2997

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180  
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600  
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660  
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<210> 2998

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2998

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Pro	Gly	Leu	Pro	Glu	Pro	Ser	Lys	Val	Thr	Ser	Pro	Val	Val	Thr	Ser
		20						25					30		
Ser	Thr	Ile	Lys	Asp	Ile	Val	Ser	Thr	Thr	Ile	Pro	Ala	Ser	Ser	Glu
		35					40					45			
Ile	Thr	Arg	Ile	Glu	Met	Glu	Ser	Thr	Ser	Thr	Leu	Thr	Pro	Thr	Pro
	50				55						60				
Arg	Glu	Thr	Ser	Thr	Ser	Gln	Glu	Ile	His	Ser	Ala	Thr	Lys	Pro	Ser
65				70					75					80	
Thr	Val	Pro	Tyr	Lys	Ala	Leu	Thr	Ser	Ala	Thr	Ile	Glu	Asp	Ser	Met
				85					90					95	
Thr	Gln	Val	Met	Ser	Ser	Ser	Arg	Gly	Pro	Ser	Pro	Asp	Gln	Ser	Thr
			100					105					110		
Met	Ser	Gln	Asp	Ile	Ser	Thr	Glu	Val	Ile	Thr	Arg	Leu	Ser	Thr	Ser
		115					120					125			
Pro	Ile	Lys	Thr	Glu	Ser	Thr	Glu	Met	Thr	Ile	Thr	Thr	Gln	Thr	Gly
	130						135					140			
Ser	Pro	Gly	Ala	Thr	Ser	Arg	Gly	Thr	Leu	Thr	Leu	Asp	Thr	Ser	Thr
145					150					155					160
Thr	Phe	Met	Ser	Gly	Thr	His	Ser	Thr	Ala	Ser	Gln	Arg	Phe	Ser	His
				165					170					175	
Ser	Gln	Met	Thr	Ala	Leu	Met	Ser	Arg	Thr	Pro	Gly	Asp	Val	Pro	Trp
			180					185					190		
Leu	Thr	His	Pro	Ser	Gly	Glu	Glu	Pro	Ala	Ser	Ala	Ser	Phe	Ser	Leu
	195						200					205			
Ala	Ser	Pro	Val	Leu	Thr	Ser	Phe	Phe	Ser	Phe	Phe	Ala	His	Ser	Gln
	210					215					220				
Lys	Pro	Pro	Pro	Phe	Leu	Val	Pro	Gly	Gln	Thr	Phe	Ser	Leu	Gly	Leu
225					230					235					240
Gly	Lys	Pro	Lys	Met	Trp	Gly	Gln	Pro	Arg	Thr	Glu	Thr	Phe	Pro	Pro
				245					250					255	
Met	Asp	Asn	Leu	Phe	Glu	Lys	Gly	Pro	Phe						
			260					265							

<210> 2999

<211> 550

<212> DNA

<213> Homo sapiens

<400> 2999

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 180  
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 240  
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 420  
 gagctgagcg gatatcagga cgacaagctg cacagaggta ctaccatac caaggcctcc  
 480  
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&lt;210&gt; 3000

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3000

Met	Cys	Ser	Ser	Gln	Gln	Arg	Gly	Gly	Leu	Gly	Met	Gly	Ser	Thr	Ser
1				5					10					15	
Val	Gln	Leu	Val	Val	Leu	Ile	Ser	Ala	Gln	Leu	Trp	Leu	Ser	Pro	Gly
		20						25					30		
Ala	Phe	Met	Gly	Leu	Arg	Gly	Glu	Lys	Val	His	Ala	Asn	Ser	Ser	Met
		35					40					45			
Gly	Gly	His	Gly	Trp	Ala	Gln	Gly	Lys	Ala	Pro	Gln	Val	Ala	Leu	Ala
	50					55					60				
Val	Ser	Gly	Thr	Gly	Asp	Pro	Ser	Pro	Arg	Leu	Gln	Ala	Phe	Pro	Gly
				70						75				80	
Leu	Glu	Val	Gly	Leu	His	Cys	Gly	Pro	Ala	Ser	Phe	His	Pro	Gly	Ala
				85					90					95	
Cys	Leu	Pro	Pro	Ala	Ala	Val	His	Gly	Asp	Gln	Ala	Val	His	Val	Lys
		100						105					110		
Gly	Cys	Leu	Gln	Ala	Ser	Thr	Gly	Leu	Ser	Ser	Val	His	Pro	Ser	Ala
		115						120				125			
Ser	Phe	Pro	Cys	Leu	Ser	Val	Pro	Lys	Ala	Trp	Arg	Gly	Pro	Lys	Trp
	130					135					140				
Gln	Gly	Gly	Trp	His	Val	Ser	Thr	Thr	Pro	Ser	Met	Cys	Thr	Leu	Ser
	145				150					155				160	
Trp	Ala	Val	Thr	Ala	Pro	Gly									
						165									

&lt;210&gt; 3001

&lt;211&gt; 1092

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3001

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 1092

&lt;210&gt; 3002

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3002

Met	Ala	Pro	Phe	Arg	Ile	Pro	Gln	Asp	Val	Ile	His	Asn	Ser	Ser	Ala
1				5					10					15	
Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35				40					45				
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50				55					60					
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

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<210> 3003
<211> 474
<212> DNA
<213> Homo sapiens
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<210> 3004
<211> 155
<212> PRT
<213> Homo sapiens
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2234



130 135 140  
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser  
 145 150 155

<210> 3005  
 <211> 799  
 <212> DNA  
 <213> Homo sapiens

<400> 3005  
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 120  
 ccaggcctcg tgaagattgt ccgcaacagc cggcggaag gactgatccg cgcgcggctg  
 180  
 cagggctgga aggcggccac cgcctcagtc gtcggcttct ttgatgccca cgtcagttc  
 240  
 aacacgggct gggcggagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcggtg  
 300  
 ctgccagcca tcgacaacat caagtacagc acgtttgagg tgcagcagta tgcgaacgcc  
 360  
 gccatggct acaactgggg cctctggtgc atgtacatca tcccccgca ggactggctg  
 420  
 gaccgcggcg acgagtcagc acccatcagg accccagcca tgatcggtg ctccttcgta  
 480  
 gtggaccgcg agtacttcgg agacattggg ctgctggacc ccggcatgga ggtgtatggc  
 540  
 ggcgagaacg tagaactggg catgaggggtg tggcagtggt gcggcagcat ggaggtgctg  
 600  
 cctgtctccc gcgtggccca catcgagcgc accaggaagc cctacaacaa cgacattgac  
 660  
 tactacgcca agcgcaacgc cctgcgcacc gccgaggtgt ggatggatga cttcaagtc  
 720  
 cagtggtaca tggcctggaa catccccatg tcgaaccag ggggtggactt cggggacgtg  
 780  
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 799

<210> 3006  
 <211> 266  
 <212> PRT  
 <213> Homo sapiens

<400> 3006  
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 1 5 10 15  
 Ile Leu Val Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu  
 20 25 30  
 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg  
 35 40 45  
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys  
 50 55 60  
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

65		70		75		80
Asn Thr Gly Trp	Ala Glu Pro Ala Leu Ser Arg Ile Arg Glu Asp Arg					
	85		90		95	
Arg Arg Ile Val Leu Pro Ala Ile Asp Asn Ile Lys Tyr Ser Thr Phe						
	100		105		110	
Glu Val Gln Gln Tyr Ala Asn Ala Ala His Gly Tyr Asn Trp Gly Leu						
	115		120		125	
Trp Cys Met Tyr Ile Ile Pro Pro Gln Asp Trp Leu Asp Arg Gly Asp						
	130		135		140	
Glu Ser Ala Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val						
	145		150		155	
Val Asp Arg Glu Tyr Phe Gly Asp Ile Gly Leu Leu Asp Pro Gly Met						
	165		170		175	
Glu Val Tyr Gly Gly Glu Asn Val Glu Leu Gly Met Arg Val Trp Gln						
	180		185		190	
Cys Gly Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile						
	195		200		205	
Glu Arg Thr Arg Lys Pro Tyr Asn Asn Asp Ile Asp Tyr Tyr Ala Lys						
	210		215		220	
Arg Asn Ala Leu Arg Thr Ala Glu Val Trp Met Asp Asp Phe Lys Ser						
	225		230		235	
His Val Tyr Met Ala Trp Asn Ile Pro Met Ser Asn Pro Gly Val Asp						
	245		250		255	
Phe Gly Asp Val Ser Glu Arg Leu Ala Leu						
	260		265			

&lt;210&gt; 3007

&lt;211&gt; 536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3007

cttaagagag gttgcaatgt gaatgataga gatggattga cagatatgac tcttttacat

60

tatacctgca aatctggagc tcatggtatt ggtgatgtgg aaacagctgt aaaatttgca

120

actcagctta ttgacctggg agcagacatt agtttgcgga gtcgctggac aaacatgaat

180

gctttgcatt atgctgctta ttttgatgtc cctgaactta taagagtgat ttgaaaaca

240

tcgaaaccaa aagatgtgga tgccccttgc agtgatttta attttggaac agctttgcat

300

attgcagcat acaacttggtg tgcaggtgct gtgaagtgcc tcttgagca gggagcaaat

360

cctgcattta ggaatgacaa aggacagatc cctgctgatg ttgttccaga cccagtagat

420

atgccgttag agatggctga cgccgcagcc actgctaagg aaatcaagca gatgcttcta

480

gatgcggtgc ctctgtcatg taacatctca aaggccatgc tcccccttc acgcgt

536

&lt;210&gt; 3008

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3008

```

Met Thr Leu Leu His Tyr Thr Cys Lys Ser Gly Ala His Gly Ile Gly
 1           5           10           15
Asp Val Glu Thr Ala Val Lys Phe Ala Thr Gln Leu Ile Asp Leu Gly
          20           25           30
Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
          35           40           45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
          50           55           60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
65           70           75           80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
          85           90           95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
          100          105          110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
          115          120          125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
          130          135          140
Leu Asp Ala Val Pro Leu Ser Cys Asn Ile Ser Lys Ala Met Leu Pro
145          150          155          160
Pro Ser Arg

```

&lt;210&gt; 3009

&lt;211&gt; 1335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3009

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nnacgcgtca gtctggaaag ggcacttata agagetacca gctgccctgt tggcttcgct
60
ggtcggatcg tctcctggc cccgccaaac aggcgggggg agcggccccg actgtggggc
120
catggcagta gtctcctcgt tctccgccgc cgetagccta gctgagtcgc cggcttctgc
180
gctaggggct cccaccgct cgcaggcta aggagccgct gccaccaacg agctgtgagg
240
gttactatgc tccctctttg ccgcgctctc ctctcttgc ccgcgcaggc acccctctgg
300
ctgctcagtc ctgcctcagt gtcaaaccag aagagaagta aaattcaaca aaaatttatg
360
tgtggagttc cttcttaaaa gaagaaaaaa gtgattattt agactatgga tcggagcaaa
420
cggaattcaa ttgcaggatt tctccacgt gtggagcgtc ttgaagagtt tgaaggaggt
480
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540
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600
tctggcttct tttctgaagt gttcaaggta cgacaccgag cttctggtca ggtgatggct
660

```

cttaagatga acacattgag cagtaaccgg gcaaacatgc tgaaagaagt acagctcatg  
 720  
 aatagactct cccatcccaa catccttagg ttcattgggtg tatgtgttca tcaaggacaa  
 780  
 ttgcatgcac ttacagagta tatcaactcc gggaacctgg aacagttgct agacagtaac  
 840  
 ctgcatttgc cttggactgt gagggtaaaa ctggcctatg acatagcagt gggcctcage  
 900  
 taccttcaact tcaaaggcat ttttcacgga gacctcacat ctaagaactg cctgataaag  
 960  
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 1020  
 gatgtcagca tggggagtga gaagctggcc gtggtgggtt cccattctg gatggcacct  
 1080  
 gaggttctcc gagatgagcc ctataatgaa aaggcagatg tgttctctta tggatcatc  
 1140  
 ctctgcgaga tcatcgctcc catccaggcc gatccggact atcttccccg cacagagaat  
 1200  
 ttccgggctgg actatgatgc tttccagcac atgggtgggag actgtcccc agattttctg  
 1260  
 caacttactt tcaactgctg taacgtgagt gtctttctcc ctctgccttt catcaggggc  
 1320  
 tggctgaacc ctttt  
 1335

&lt;210&gt; 3010

&lt;211&gt; 310

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3010

Met	Asp	Arg	Ser	Lys	Arg	Asn	Ser	Ile	Ala	Gly	Phe	Pro	Pro	Arg	Val
1				5					10					15	
Glu	Arg	Leu	Glu	Glu	Phe	Glu	Gly	Gly	Gly	Gly	Gly	Glu	Gly	Asn	Val
			20					25					30		
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
			35				40				45				
Ala	Phe	Ser	Arg	Leu	Thr	Arg	Leu	Asp	Asp	Phe	Thr	Cys	Lys	Lys	Ile
			50			55					60				
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser
65					70				75					80	
Gly	Gln	Val	Met	Ala	Leu	Lys	Met	Asn	Thr	Leu	Ser	Ser	Asn	Arg	Ala
			85					90					95		
Asn	Met	Leu	Lys	Glu	Val	Gln	Leu	Met	Asn	Arg	Leu	Ser	His	Pro	Asn
			100				105					110			
Ile	Leu	Arg	Phe	Met	Gly	Val	Cys	Val	His	Gln	Gly	Gln	Leu	His	Ala
			115				120					125			
Leu	Thr	Glu	Tyr	Ile	Asn	Ser	Gly	Asn	Leu	Glu	Gln	Leu	Leu	Asp	Ser
			130			135					140				
Asn	Leu	His	Leu	Pro	Trp	Thr	Val	Arg	Val	Lys	Leu	Ala	Tyr	Asp	Ile
145				150						155				160	
Ala	Val	Gly	Leu	Ser	Tyr	Leu	His	Phe	Lys	Gly	Ile	Phe	His	Arg	Asp
			165					170						175	
Leu	Thr	Ser	Lys	Asn	Cys	Leu	Ile	Lys	Arg	Asp	Glu	Asn	Gly	Tyr	Ser

180	185	190
Ala Val Val Ala Asp Phe Gly Leu Ala Glu Lys Ile Pro Asp Val Ser		
195	200	205
Met Gly Ser Glu Lys Leu Ala Val Val Gly Ser Pro Phe Trp Met Ala		
210	215	220
Pro Glu Val Leu Arg Asp Glu Pro Tyr Asn Glu Lys Ala Asp Val Phe		
225	230	235
Ser Tyr Gly Ile Ile Leu Cys Glu Ile Ile Val Arg Ile Gln Ala Asp		
245	250	255
Pro Asp Tyr Leu Pro Arg Thr Glu Asn Phe Gly Leu Asp Tyr Asp Ala		
260	265	270
Phe Gln His Met Val Gly Asp Cys Pro Pro Asp Phe Leu Gln Leu Thr		
275	280	285
Phe Asn Cys Cys Asn Val Ser Val Phe Leu Pro Leu Pro Phe Ile Arg		
290	295	300
Gly Trp Leu Asn Pro Phe		
305	310	

&lt;210&gt; 3011

&lt;211&gt; 3253

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3011

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120
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180
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240
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300
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360
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420
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720
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780
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840
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900

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cccagccagt atggccagga ggtgtatgac acacccccca tggctgtcaa gggccccaat  
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1380  
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1440  
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1800  
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1860  
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1920  
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1980  
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2040  
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2100  
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2160  
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2280  
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2400  
accaacgcgg tggacgctt ctttaccgcc gtggccacca accagccgcc caagatcttt  
2460  
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2520

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 2700  
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 2880  
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 3060  
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 3240  
 aaaaaaaaaa aaa  
 3253

&lt;210&gt; 3012

&lt;211&gt; 870

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3012

Met	Asn	His	Leu	Asn	Val	Leu	Ala	Lys	Ala	Leu	Tyr	Asp	Asn	Val	Ala
1				5					10					15	
Glu	Ser	Pro	Asp	Glu	Leu	Ser	Phe	Arg	Lys	Gly	Asp	Ile	Met	Thr	Val
			20					25					30		
Leu	Glu	Gln	Asp	Thr	Gln	Gly	Leu	Asp	Gly	Trp	Trp	Leu	Cys	Ser	Leu
		35				40						45			
His	Gly	Arg	Gln	Gly	Ile	Val	Pro	Gly	Asn	Arg	Leu	Lys	Ile	Leu	Val
	50					55					60				
Gly	Met	Tyr	Asp	Lys	Lys	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Pro	Pro	Ala
65					70				75					80	
Thr	Pro	Ala	Gln	Pro	Gln	Pro	Gly	Leu	His	Ala	Pro	Ala	Pro	Pro	Ala
			85					90					95		
Ser	Gln	Tyr	Thr	Pro	Met	Leu	Pro	Asn	Thr	Tyr	Gln	Pro	Gln	Pro	Asp
			100					105				110			
Ser	Val	Tyr	Leu	Val	Pro	Thr	Pro	Ser	Lys	Ala	Gln	Gln	Gly	Leu	Tyr
		115					120					125			
Gln	Val	Pro	Gly	Pro	Ser	Pro	Gln	Phe	Gln	Ser	Pro	Pro	Ala	Lys	Gln
	130						135					140			
Thr	Ser	Thr	Phe	Ser	Lys	Gln	Thr	Pro	His	His	Pro	Phe	Pro	Ser	Pro
145					150				155					160	
Ala	Thr	Asp	Leu	Tyr	Gln	Val	Pro	Pro	Gly	Pro	Gly	Gly	Pro	Ala	Gln

2242



595	600	605
Lys Ala Thr Ala Pro Gly Pro Glu Gly Gly Thr Leu His Pro Asn		
610	615	620
Pro Thr Asp Lys Thr Ser Ser Ile Gln Ser Arg Pro Leu Pro Ser Pro		
625	630	635
Pro Lys Phe Thr Ser Gln Asp Ser Pro Asp Gly Gln Tyr Glu Asn Ser		
645	650	655
Glu Gly Gly Trp Met Glu Asp Tyr Asp Tyr Val His Leu Gln Gly Lys		
660	665	670
Glu Glu Phe Glu Lys Thr Gln Lys Glu Leu Leu Glu Lys Gly Asn Ile		
675	680	685
Thr Arg Gln Gly Lys Ser Gln Leu Glu Leu Gln Gln Leu Lys Gln Phe		
690	695	700
Glu Arg Leu Glu Gln Glu Val Ser Arg Pro Ile Asp His Asp Leu Ala		
705	710	715
Asn Trp Thr Pro Ala Gln Pro Leu Ala Pro Gly Arg Thr Gly Gly Leu		
725	730	735
Gly Pro Ser Asp Arg Gln Leu Leu Leu Phe Tyr Leu Glu Gln Cys Glu		
740	745	750
Ala Asn Leu Thr Thr Leu Thr Asn Ala Val Asp Ala Phe Phe Thr Ala		
755	760	765
Val Ala Thr Asn Gln Pro Pro Lys Ile Phe Val Ala His Ser Lys Phe		
770	775	780
Val Ile Leu Ser Ala His Lys Leu Val Phe Ile Gly Asp Thr Leu Ser		
785	790	795
Arg Gln Ala Lys Ala Ala Asp Val Arg Ser Gln Val Thr His Tyr Ser		
805	810	815
Asn Leu Leu Cys Asp Leu Leu Arg Gly Ile Val Ala Thr Thr Lys Ala		
820	825	830
Ala Ala Leu Gln Tyr Pro Ser Pro Ser Ala Ala Gln Asp Met Val Glu		
835	840	845
Arg Val Lys Glu Leu Gly His Ser Thr Gln Gln Phe Arg Arg Val Leu		
850	855	860
Gly Gln Leu Ala Ala Ala		
865	870	

&lt;210&gt; 3013

&lt;211&gt; 248

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3013

nnaacgcgtga aggggacagt cgtgatcttt gacgaagctc acaacgtgga gaagatgtgt

60

gaagaatcgg catcctttga cctgactccc catgacctgg cttcaggact ggacgtcata

120

gaccaggtgc tggaggagca gaccaaggca gcgcagcagg ctgggtgggg cctcctcctt

180

gagaggaggt ggggtggcacc tctcgaccc acagtgatcc tgctgcgcct ggaagggggc

240

atcgatgc

248

&lt;210&gt; 3014

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3014

```

Xaa Arg Val Lys Gly Thr Val Val Ile Phe Asp Glu Ala His Asn Val
 1           5           10           15
Glu Lys Met Cys Glu Glu Ser Ala Ser Phe Asp Leu Thr Pro His Asp
          20           25           30
Leu Ala Ser Gly Leu Asp Val Ile Asp Gln Val Leu Glu Glu Thr
          35           40           45
Lys Ala Ala Gln Gln Ala Gly Trp Gly Leu Leu Leu Ala Arg Arg Trp
          50           55           60
Val Ala Pro Pro Arg Pro Thr Val Ile Leu Leu Arg Leu Glu Gly Ala
65           70           75           80
Ile Asp

```

&lt;210&gt; 3015

&lt;211&gt; 438

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3015

```

ntgtatctct cctgtgtctt cacccaaaaa atgaaaacag ctattaaaca tacctggcct
60
gaagacggcc ccaaggcatt ctgggggagg gaatggaaag ctgcccaaca catctggtat
120
ccggagaagc attttcacia cttaaacttga cctgaccag ctgcacggtg actggctcca
180
ggaagatggg gtgaaccatc cctcctggga ccctgtgaca aaaggcaaaa gctcttgggc
240
aaagctgcca ggggggcttg cggggggggg gtgtgcggtg gacattgtga tttggtagac
300
tttggtggaa gatgtttgga aactctggta ttgagggccca acagcacgtg ctcattgtgc
360
cttctgcttg cccatctgca gcagttcctg cgacctggga ggtgggcgag catccacagg
420
tgcaacagca acgggcta
438

```

&lt;210&gt; 3016

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3016

```

Met Ser Thr Cys Cys Trp Pro Ser Ile Pro Glu Phe Pro Asn Ile Phe
 1           5           10           15
His Gln Ser Leu Pro Asn His Asn Val Thr Arg Thr Pro Pro Pro Arg
          20           25           30
Lys Pro Pro Trp Gln Leu Cys Pro Arg Ala Phe Ala Phe Cys His Arg
          35           40           45
Val Pro Gly Gly Met Val His Pro Ile Phe Leu Glu Pro Val Thr Val

```

50		55		60
Gln Leu Gly Gln Val Lys Phe Ser Cys Glu Asn Ala Ser Pro Asp Thr				
65		70		75
Arg Cys Val Gly Gln Leu Ser Ile Pro Ser Pro Arg Met Pro Trp Gly				80
	85		90	95
Arg Leu Gln Ala Arg Tyr Val				
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&lt;210&gt; 3017

&lt;211&gt; 4796

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3017

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 <212> PRT  
 <213> Homo sapiens

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 Gln Arg Trp Ile Thr Ile Gln His Arg Trp Ser Ser Ala Leu His Cys  
 35 40 45  
 Gln Gly Leu Thr Pro Thr Pro Gly Ala Leu Pro Asn Tyr Leu Lys Val  
 50 55 60  
 Lys Ala Asn Arg Ala Ile Pro Gln Ala Val Thr Ser Thr Arg Leu Gly  
 65 70 75 80  
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&lt;210&gt; 3020

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3020

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Gly	Pro	Ala	Pro	Val	Leu	Leu	Ser	Ala	Arg	Pro	Gln	Gly	Pro	Ala	Arg
			20				25				30				
Asp	Pro	Ala	Arg	Pro	Arg	Phe	Leu	Ala	Cys	His	His	Arg	Gln	Thr	Cys
		35				40						45			
Gln	Pro	Leu	Pro	Ala	Gly	Leu	Pro	Gly	Arg						
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&lt;210&gt; 3021

&lt;211&gt; 1008

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3021

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 900  
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 1008

<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3022

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			20				25						30		
His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
		35					40					45			
Pro	Val	Ala	Gly	Thr	Thr	Gly	Ala	Leu	Pro	His	Arg	Lys	Ala	His	Phe
		50				55					60				
Leu	Glu	Ala	Glu	Thr	Glu	Ala	Pro	Ser	Gly	Lys	Gly	Asp	Pro	Pro	Gly
65					70					75				80	
Met	Arg	Gly	Ala	Gln	Arg	Ala	Ala	Thr	Trp	Gly	Pro	Thr	Arg		
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<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 3023

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 300



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1834

&lt;210&gt; 3024

&lt;211&gt; 347

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3024

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      35          40          45
Met Leu Arg Ser His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp
      50          55          60
Met Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys Ala
      65          70          75          80
Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr Gln
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Asp Ala Arg Leu Val His Ala Asp Leu Ser Glu Phe Asn Met Leu Tyr
      100          105          110
His Gly Gly Gly Val Tyr Ile Ile Asp Val Ser Gln Ser Val Glu His
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Asp His Pro His Ala Leu Glu Phe Leu Arg Lys Asp Cys Ala Asn Val
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Asn Asp Phe Phe Met Arg His Ser Val Ala Val Met Thr Val Arg Glu
      145          150          155          160
Leu Phe Glu Phe Val Thr Asp Pro Ser Ile Thr His Glu Asn Met Asp
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Ala Tyr Leu Ser Lys Ala Met Glu Ile Ala Ser Gln Arg Thr Lys Glu
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Glu Arg Ser Ser Gln Asp His Val Asp Glu Glu Val Phe Lys Arg Ala
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Gln Asp Asn Ile Leu Pro Asp Cys Tyr Arg Ile Glu Glu Arg Phe Val
      245          250          255
Arg Ser Ser Glu Gly Pro Cys Thr Leu Glu Asn Gln Val Glu Glu Arg
      260          265          270
Thr Cys Ser Asp Ser Glu Asp Ile Gly Ser Ser Glu Cys Ser Asp Thr
      275          280          285
Asp Ser Glu Glu Gln Gly Asp His Ala Arg Pro Lys Lys His Thr Thr
      290          295          300
Asp Pro Asp Ile Asp Lys Lys Glu Arg Lys Lys Met Val Lys Glu Ala
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Gln Arg Glu Lys Arg Lys Asn Lys Ile Pro Lys His Val Lys Lys Arg
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Lys Glu Lys Thr Ala Lys Thr Lys Lys Gly Lys
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&lt;210&gt; 3025

&lt;211&gt; 1370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3025

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&lt;210&gt; 3026

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3026

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Met Glu Ser Leu Ser Lys Gly Gly Asn Ile Met Glu Gln Asn Phe Glu
 1           5           10           15
Pro Ile Arg Arg Gln Ser Leu Thr Pro Pro Pro Gln Asn Thr Ile Thr
          20           25           30
Trp Glu Glu Tyr Ile Ser Ala Glu Asn Gly Lys Ala Pro His Leu Gly
          35           40           45
Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
          50           55           60
Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
65           70           75           80
Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe
          85           90           95
Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
          100          105          110
Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
          115          120          125
Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu
          130          135          140
Asp Pro Ser Arg Phe Pro Asp Leu
145           150

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&lt;210&gt; 3027

&lt;211&gt; 1154

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3027

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atccacgccca aggccttttg atcggccgtg ggtacatccg tctgagccgt tcttttccat
120
cgcagacggc ggcctccgcy gcgctctcca gtcattggact accggcggct tctcatgagc
180
cgggtggtcc ccgggcaatt cgacgacgcy gactcctctg acagtgaaaa cagagacttg
240
aagacagtca aagagaagga tgacattctg tttgaagacc ttcaagacaa tgtgaatgag
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aatggtgaag gtgaaataga agatgaggag gaggagggtt atgatgatga tgatgatgac
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720
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780

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tataaaactt ctatttttgt gttcaaagat cgggataaat atgtaagtgg agaattcaga  
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gaaatgagga acttaatcag gctaaacaca gcagagatac catgtccaga accaataatg  
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<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

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Asp	Asp	Ala	Asp	Ser	Ser	Asp	Ser	Glu	Asn	Arg	Asp	Leu	Lys	Thr	Val
		20						25					30		
Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
		35					40					45			
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Gly	Tyr	Asp	
		50				55				60					
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
65					70				75					80	
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
			85					90					95		
Thr	Ser	Asp	Ser	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val
			100					105					110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
		115					120					125			
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
		130				135					140				
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
145					150				155					160	
Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
			165					170					175		
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
			180					185					190		
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
		195					200					205			
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
		210				215					220				
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
225					230				235				240		
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
			245					250					255		
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

260	265	270
His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His		
275	280	285
Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys		
290	295	300
Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr		
305	310	315
Gln Asp Ala Arg Leu Val His Ala Asp Arg Arg		320
325	330	

&lt;210&gt; 3029

&lt;211&gt; 344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3029

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ctgaaaagat tcgattttga ttatacaacc atgcatagga ttaaactgaa tgatcgaatg  
120  
acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct  
180  
cagactgaaa gttgcactga caggggagca gaaaatgaag gtagttgtca cagtgatcag  
240  
atgagcaacg atttctccaa tgatgatggt gttgatgaag gaatctgttt tgaaaccaat  
300  
agtggaaactg aaaagatctc aaaatctgga cctgaaaaga attc  
344

&lt;210&gt; 3030

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3030

Thr Arg Asp Ala Arg Lys Gly Leu Arg Phe Leu His Phe Pro Tyr Leu		
1	5	10
Leu Thr Leu Gln Leu Lys Arg Phe Asp Phe Asp Tyr Thr Thr Met His		15
20	25	30
Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu Asp Met		
35	40	45
Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser		
50	55	60
Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln		
65	70	75
Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys		
85	90	95
Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu		
100	105	110
Lys Asn		

&lt;210&gt; 3031

&lt;211&gt; 567

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3031

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60  
cctccccctt cctattttgc cacgttttac tcgtgcacac cccggatgaa ccgcagattg  
120  
gttggtcctg atgttattcc cctgccacac atctacggag ctgcaatcaa aggtgtggaa  
180  
gtgttctgtc ctctggatcc cccgccgcca tatgaagctg tggtgagcca gatggaccag  
240  
gagcagggat cttcattcca aatgtcagaa ggatcagaag ctgctgtgat cccattggat  
300  
ctgggctgca cacaagtgc tcaagatggg gacattccta acatacctgc cgaagaaaat  
360  
gcatccacct caactcccag ttcaaccctg gtgcgtccta tcagaagccg gagagccctc  
420  
ccacccttga ggaccaggtc gaagagtgc cctgtgctcc atccttctga ggagagagct  
480  
gccccagtgc tcagctgtga agctgcaaca cagactgaaa ggagactgga tctggctgca  
540  
gtgactctga ggagaggctt gagatct  
567

&lt;210&gt; 3032

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3032

Ala Glu Glu Ala Glu Asp His Gly Arg Ile Pro Asp Pro Asp Asp Phe  
1 5 10 15  
Val Pro Pro Val Pro Pro Pro Ser Tyr Phe Ala Thr Phe Tyr Ser Cys  
20 25 30  
Thr Pro Arg Met Asn Arg Arg Leu Val Gly Pro Asp Val Ile Pro Leu  
35 40 45  
Pro His Ile Tyr Gly Ala Arg Ile Lys Gly Val Glu Val Phe Cys Pro  
50 55 60  
Leu Asp Pro Pro Pro Pro Tyr Glu Ala Val Val Ser Gln Met Asp Gln  
65 70 75 80  
Glu Gln Gly Ser Ser Phe Gln Met Ser Glu Gly Ser Glu Ala Ala Val  
85 90 95  
Ile Pro Leu Asp Leu Gly Cys Thr Gln Val Thr Gln Asp Gly Asp Ile  
100 105 110  
Pro Asn Ile Pro Ala Glu Glu Asn Ala Ser Thr Ser Thr Pro Ser Ser  
115 120 125  
Thr Leu Val Arg Pro Ile Arg Ser Arg Arg Ala Leu Pro Pro Leu Arg  
130 135 140  
Thr Arg Ser Lys Ser Asp Pro Val Leu His Pro Ser Glu Glu Arg Ala  
145 150 155 160  
Ala Pro Val Leu Ser Cys Glu Ala Ala Thr Gln Thr Glu Arg Arg Leu  
165 170 175  
Asp Leu Ala Ala Val Thr Leu Arg Arg Gly Leu Arg Ser

180

185

<210> 3033  
 <211> 821  
 <212> DNA  
 <213> Homo sapiens

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 120  
 tactatgata aattatttaa ggaatactgc atagcagatc tcagtaaata taaagaaaaa  
 180  
 aagtttggat ttaggtggcg agtagaaaaa gaagtaattt caggaaaagg tcaatttttc  
 240  
 tgtggaaata aatattgtga taaaaaagaa ggcttaaaga gttgggaagt taattttggt  
 300  
 tatattgagc atggtgagaa gagaaatgca cttgttaaata taaggttatg ccaagaatgt  
 360  
 tccattaaat taaatttcca tcacaggaga aaagaaatca agtcaaaaaa aagaaaagat  
 420  
 aaaacaaaaa aagactgtga agagtcacat cataaaaaat ccagattatc ttctgcagaa  
 480  
 gaggcctcca agaaaaaaga taaaggacat tcattcttcaa agaaatctga agattctcta  
 540  
 cttagaaact ctgatgagga agaaagtgtc tcagaatctg aactttggaa ggttccacta  
 600  
 ccagagacag atgaaaaatc acaggaagaa gaatttgatg agtattttca ggatttgttt  
 660  
 ctatgagacg agagagagaa gcctccgctc cttaatgtga aacttcacga agttttaaac  
 720  
 ctcatgcaat ttgaaattcc atctacgtct ttatctgcaa gttacagctt ctgtgctttg  
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 821

<210> 3034  
 <211> 221  
 <212> PRT  
 <213> Homo sapiens

<400> 3034  
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 20 25 30  
 Trp Glu Lys Arg Leu Ala Lys Lys Tyr Tyr Asp Lys Leu Phe Lys Glu  
 35 40 45  
 Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe  
 50 55 60  
 Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe  
 65 70 75 80  
 Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu



				85						90					95				
Val	Asn	Phe	Gly	Tyr	Ile	Glu	His	Gly	Glu	Lys	Arg	Asn	Ala	Leu	Val				
			100					105					110						
Lys	Leu	Arg	Leu	Cys	Gln	Glu	Cys	Ser	Ile	Lys	Leu	Asn	Phe	His	His				
		115					120					125							
Arg	Arg	Lys	Glu	Ile	Lys	Ser	Lys	Lys	Arg	Lys	Asp	Lys	Thr	Lys	Lys				
		130			135					140									
Asp	Cys	Glu	Glu	Ser	Ser	His	Lys	Lys	Ser	Arg	Leu	Ser	Ser	Ala	Glu				
145				150					155					160					
Glu	Ala	Ser	Lys	Lys	Lys	Asp	Lys	Gly	His	Ser	Ser	Ser	Lys	Lys	Ser				
			165			170							175						
Glu	Asp	Ser	Leu	Leu	Arg	Asn	Ser	Asp	Glu	Glu	Glu	Ser	Ala	Ser	Glu				
		180				185						190							
Ser	Glu	Leu	Trp	Lys	Gly	Pro	Leu	Pro	Glu	Thr	Asp	Glu	Lys	Ser	Gln				
	195					200						205							
Glu	Glu	Glu	Phe	Asp	Glu	Tyr	Phe	Gln	Asp	Leu	Phe	Leu							
	210					215						220							

&lt;210&gt; 3035

&lt;211&gt; 878

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3035

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cctcagacca cgacaggggc ctccacaca cggctcgag aacctgtgca aggagaacca  
180  
caaaggatga gcactctggc ccacccaaaa ccatggcagc cctgagggca cagactggac  
240  
accctgcaga gtctcactct gtcatcagg gtggagtga atggcgcaat ctcagctcac  
300  
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360  
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420  
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480  
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540  
agtctctgac ccggcggcca gcacaccagt gtgaatcacg tgtgtcccca gtgagtctct  
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cgaccagagc accagtgtga atcacatgcg tccccgggtga gtctctgcag ggtgtccagt  
720  
ctgtgccctc agggctgcca tggttttggg tgggccagag tgctcactct ttgtggttct  
780  
ccttgacaaa gttctgcgag ccatgtgtgg gagggccctg tctgtgtctg aggacgtccc  
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878

<210> 3036  
<211> 65  
<212> PRT  
<213> Homo sapiens

<400> 3036  
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Glu Cys Asn Gly Ala Ile Ser Ala His Cys Asn Leu Pro Leu Pro Gly  
20 25 30  
Ser Ser Asn Ser Pro Asp Pro His Ser Gly Pro Ala Pro Ser Gln Thr  
35 40 45  
Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp  
50 55 60  
Pro  
65

<210> 3037  
<211> 3538  
<212> DNA  
<213> Homo sapiens

<400> 3037  
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180  
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300  
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360  
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420  
aataaaactg ttggttttat aggagaacta actaagttaa agatgttcac caaaaatgac  
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acactgcatt gtttaaagat gcttctgtca gacttctctc atcaccatat tgaaatggca  
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660  
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720  
gtgaaaaaga aacgtcctcc tctccaggaa tatgtccgga aacttttgta caaggatctc  
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gaagtgaag actatgttat ttgttgatg ataaacatct ggaatgtgaa atataatagt  
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1020  
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1560  
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2040  
gcagaacaag aagagaggat gagaatgaaa aagctcacac tagatatcaa tgaacggcaa  
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2160  
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2220  
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2280  
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2340  
ctcagcaggt cggcttagag agttgcgaat ctaaacctgg gacaggctgg ggccaggag  
2400  
cagaaacacc agcctctgcc aacaccggaa caagccgacg cttccagaca aggcggaaaa  
2460  
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2520

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 2700  
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 2760  
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 2820  
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 2880  
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 2940  
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 3060  
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 3120  
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 3180  
 gtttttgttt tgtttttttt tgttttcccc cactaaatag aaatgagggt ccttagtctg  
 3240  
 tttctgacaa tctgttaatt tcttaggaca gctgtctttg gtttgctttc cagcaggcgt  
 3300  
 agtatattta gtcggagagc acatctgtat gcgacaactt gattacatct ttttttctag  
 3360  
 ctattttgca ttttttcttt taccatgttt cagtttctgc atgtagattt aaataaaaaa  
 3420  
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 3480  
 gaaatctgac ctttgccgat gctgcaataa agtgttgtaa tttaaaaaaa aaaaaaaa  
 3538

&lt;210&gt; 3038

&lt;211&gt; 697

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3038

Pro	Asn	Cys	Val	Asn	Arg	Asp	Leu	Ile	Asp	Lys	Ala	Ala	Met	Asp	Phe
1				5					10					15	
Cys	Met	Asn	Met	Asn	Thr	Lys	Ala	Asn	Arg	Lys	Lys	Leu	Val	Arg	Ala
			20					25					30		
Leu	Phe	Ile	Val	Pro	Arg	Gln	Arg	Leu	Asp	Leu	Leu	Pro	Phe	Tyr	Ala
		35				40						45			
Arg	Leu	Val	Ala	Thr	Leu	His	Pro	Cys	Met	Ser	Asp	Val	Ala	Glu	Asp
		50				55					60				
Leu	Cys	Ser	Met	Leu	Arg	Gly	Asp	Phe	Arg	Phe	His	Val	Arg	Lys	Lys
65					70				75					80	
Asp	Gln	Ile	Asn	Ile	Glu	Thr	Lys	Asn	Lys	Thr	Val	Arg	Phe	Ile	Gly
			85					90					95		
Glu	Leu	Thr	Lys	Phe	Lys	Met	Phe	Thr	Lys	Asn	Asp	Thr	Leu	His	Cys

2263

530	535	540
Met Met Leu Glu Asn Leu Gln Gln Arg Ser Gly Glu Ser Val Lys Val		
545	550	555
His Gln Leu Asp Val Ala Ile Pro Leu His Leu Lys Ser Gln Leu Arg		560
	565	570
Lys Gly Pro Pro Leu Gly Gly Gly Glu Gly Glu Ala Glu Ser Ala Asp		575
	580	585
Thr Met Pro Phe Val Met Leu Thr Arg Lys Gly Asn Lys Gln Gln Phe		590
	595	600
Lys Ile Leu Asn Val Pro Met Ser Ser Gln Leu Ala Ala Asn His Trp		605
	610	615
Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg Met Arg Met Lys Lys Leu		620
625	630	635
Thr Leu Asp Ile Asn Glu Arg Gln Glu Gln Glu Asp Tyr Gln Glu Met		640
	645	650
Leu Gln Ser Leu Ala Gln Arg Pro Ala Pro Ala Asn Thr Asn Arg Glu		655
	660	665
Arg Arg Pro Arg Tyr Gln His Pro Lys Gly Ala Pro Asn Ala Asp Leu		670
	675	680
Ile Phe Lys Thr Gly Gly Arg Arg		685
690	695	

&lt;210&gt; 3039

&lt;211&gt; 1836

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3039

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 1836

&lt;210&gt; 3040

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3040

Thr	Leu	Cys	His	Cys	Leu	Asp	Leu	His	Ile	Arg	Ala	Ala	Leu	Met	Pro
1				5					10					15	
Leu	Pro	Asp	Thr	Ala	Thr	Gly	Leu	Asp	Trp	Thr	His	Leu	Val	Asp	Ala
			20					25					30		
Ala	Arg	Ala	Phe	Glu	Asp	Gln	Arg	Val	Ala	Ser	Phe	Cys	Thr	Leu	Thr
		35					40					45			
Asp	Met	Gln	His	Gly	Gln	Asp	Leu	Glu	Gly	Ala	Gln	Glu	Leu	Pro	Leu
	50					55					60				
Cys	Val	Asp	Pro	Gly	Ser	Gly	Lys	Glu	Phe	Met	Asp	Thr	Thr	Gly	Glu
65					70					75				80	
Arg	Ser	Pro	Ser	Pro	Leu	Thr	Gly	Lys	Val	Asn	Gln	Leu	Glu	Leu	Ile

	85		90		95										
Leu	Arg	Gln	Leu	Gln	Thr	Asp	Leu	Arg	Lys	Glu	Lys	Gln	Asp	Lys	Ala
	100		105		110										
Gly	Leu	Gln	Ala	Glu	Val	Gln	His	Leu	Arg	Gln	Asp	Asn	Met	Arg	Leu
	115		120		125										
Gln	Glu	Glu	Ser	Gln	Thr	Ala	Thr	Ala	Gln	Leu	Arg	Lys	Leu		
	130		135		140										

&lt;210&gt; 3041

&lt;211&gt; 1512

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3041

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1200

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<210> 3042

<211> 360

<212> PRT

<213> Homo sapiens

<400> 3042

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Leu	Thr	Leu	Ser	Thr	Pro	Lys	Pro	Leu	Val	Asp	Phe	Cys	Asn	Lys	Pro
			20					25					30		
Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Ala	Gly	Val	Asp	His
			35				40					45			
Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met
	50					55					60				
Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu
65					70				75					80	
Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu
				85				90						95	
Leu	Ser	Glu	Thr	Ala	Asp	Pro	Phe	Phe	Val	Leu	Asn	Ser	Asp	Val	Ile
			100					105					110		
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly
		115					120					125			
Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr
	130					135						140			
Gly	Val	Val	Val	Cys	Glu	Ala	Asp	Thr	Gly	Arg	Ile	His	Arg	Phe	Val
145					150					155					160
Glu	Lys	Pro	Gln	Val	Phe	Val	Ser	Asn	Lys	Ile	Asn	Ala	Gly	Met	Tyr
				165					170					175	
Ile	Leu	Ser	Pro	Ala	Val	Leu	Arg	Arg	Ile	Gln	Leu	Gln	Pro	Thr	Ser
			180					185						190	
Ile	Glu	Lys	Glu	Val	Phe	Pro	Ile	Met	Ala	Lys	Glu	Gly	Gln	Leu	Tyr
	195						200						205		
Ala	Met	Glu	Leu	Gln	Gly	Phe	Trp	Met	Asp	Ile	Gly	Gln	Pro	Lys	Asp
	210					215					220				
Phe	Leu	Thr	Gly	Met	Cys	Leu	Phe	Leu	Gln	Ser	Leu	Arg	Gln	Lys	Gln
225					230					235					240
Pro	Glu	Arg	Leu	Cys	Ser	Gly	Pro	Gly	Ile	Val	Gly	Asn	Val	Leu	Val
				245					250					255	
Asp	Pro	Ser	Ala	Arg	Ile	Gly	Gln	Asn	Cys	Ser	Ile	Gly	Pro	Asn	Val
			260				265						270		
Ser	Leu	Gly	Pro	Gly	Val	Val	Val	Glu	Asp	Gly	Val	Cys	Ile	Arg	Arg

275                      280                      285  
 Cys Thr Val Leu Arg Asp Ala Arg Ile Arg Ser His Ser Trp Leu Glu  
 290                      295                      300  
 Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met  
 305                      310                      315                      320  
 Glu Asn Val Thr Val Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu  
 325                      330                      335  
 Tyr Leu Asn Gly Ala Ser Val Leu Pro His Lys Ser Ile Gly Glu Ser  
 340                      345                      350  
 Val Pro Glu Pro Arg Ile Ile Met  
 355                      360

&lt;210&gt; 3043

&lt;211&gt; 394

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3043

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 120  
 cttctctgac ctactccaa ctcacgtgtc ttgacactt taagggactt cctgttttag  
 180  
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 240  
 ccagcctttg ttgggggact cggaggcaga gtagacagtt acccttaccg ctggggttggg  
 300  
 gagggtcata ttcttggtat ccccaggagg tcaacagggg cttcattttt ctgaggggact  
 360  
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 394

&lt;210&gt; 3044

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3044

Met Lys Pro Leu Leu Thr Ser Trp Gly Tyr Gln Glu Tyr Asp Pro Pro  
 1                      5                      10                      15  
 Gln Pro Arg Gly Lys Gly Asn Cys Leu Leu Cys Leu Arg Val Pro Lys  
 20                      25                      30  
 Gln Arg Leu Gly Asn Ile Ser Leu Lys Leu Glu Asn His Cys Pro Phe  
 35                      40                      45  
 Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys  
 50                      55                      60  
 Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu  
 65                      70                      75                      80  
 Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr  
 85                      90                      95  
 Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser  
 100                      105                      110  
 Lys Glu Ile

115

<210> 3045  
 <211> 605  
 <212> DNA  
 <213> Homo sapiens

<400> 3045  
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 120  
 tcttggggagc cgctggcctg cttatgcaga aaacaagttg attcgatgac atcagtcaccg  
 180  
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 240  
 aacattgaaa agtggcctga caatggtagg gaaagtggg actcagctga caggcacact  
 300  
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 360  
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 420  
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 480  
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 605

<210> 3046  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 3046  
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 Ser Asp Gly Ile Val Ala His Phe Pro Ala His Glu Lys Pro Val Cys  
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 35 40 45  
 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser  
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 Ser Ser Thr Glu Arg Arg Gln Arg  
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<210> 3047  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 3047

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 180  
 gccaaaaccc tgctaaaaaa aatctcggaa gcaccaaagg catttcagat ggagaaaata  
 240  
 gaacatggct atgagaacat gaaccacttc acagtcaacc tcaatagaga agaaaagata  
 300  
 atacgtgaaa ttgactttta cagagaagat gaagatgaag aagaagaaga aggcggagaa  
 360  
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&lt;210&gt; 3048

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3048

Met	Thr	Gln	Val	Ile	Thr	Arg	Thr	Gln	Glu	Glu	Lys	Leu	Glu	His	Val
1				5				10						15	
Arg	Ala	Leu	Ile	Lys	Lys	Tyr	Ser	Asp	His	Leu	Glu	Asn	Val	Ser	Lys
		20					25					30			
Leu	Val	Glu	Ser	Gly	Ile	Gln	Phe	Met	Asp	Glu	Pro	Glu	Met	Ala	Val
		35				40					45				
Phe	Leu	Gln	Asn	Ala	Lys	Thr	Leu	Leu	Lys	Lys	Ile	Ser	Glu	Ala	Ser
	50					55					60				
Lys	Ala	Phe	Gln	Met	Glu	Lys	Ile	Glu	His	Gly	Tyr	Glu	Asn	Met	Asn
	65				70					75				80	
His	Phe	Thr	Val	Asn	Leu	Asn	Arg	Glu	Glu	Lys	Ile	Ile	Arg	Glu	Ile
			85					90						95	
Asp	Phe	Tyr	Arg	Glu	Asp	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly	Glu
		100					105						110		
Gly	Glu	Lys	Glu	Glu	Lys	Glu	Lys	Trp	Glu						
		115					120								

&lt;210&gt; 3049

&lt;211&gt; 599

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3049

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 180  
 tcgatattgt acctggaagg ctcggctctt gtgtttgagg acatcttcag attgattgcg  
 240  
 ttctactgtg tcagtagaga cttactgcc ttcacactgc ggctacccca ggccatcctt  
 300

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 360  
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<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

Met	Phe	Leu	Val	Arg	Arg	Asp	Ser	Ser	Ser	Lys	Gln	Leu	Val	Leu	Cys
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Val	His	Phe	Pro	Ser	Leu	Asn	Glu	Ser	Ser	Ala	Glu	Val	Leu	Glu	Tyr
			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
			35					40					45		
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
			50				55				60				
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75				80	
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
				85					90					95	
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
			115				120					125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
			130				135				140				
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145				150					155					160	
Ser	Ser	Ala	Leu	Pro	Thr	Asp	Gln	Pro	Pro	Leu	Gly	Asn	Cys	Pro	Ser
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Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 180

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 360  
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 420  
 ccttgacaaa cagccccatc cgcggcctcc cgactggaa ctcccagtc agcatgccgt  
 480  
 ccacgccaga cctgcgggtc cggagtcccc actacgtcca ttccacgagg tcggtggaca  
 540  
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 600  
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 720  
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 820

<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

Arg	Leu	Ser	Gly	Tyr	Gln	His	Asn	Ile	Pro	Pro	Thr	Phe	Ser	Ser	Gln
1				5				10						15	
Gly	Thr	Pro	Ser	Ser	Ala	Thr	Val	Ala	Gln	Gln	Ala	Ser	Ser	Ser	Pro
			20				25						30		
Val	Pro	Gly	Gly	Thr	Pro	Thr	Asp	Ala	Leu	Ser	Pro	Xaa	Thr	Thr	Met
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<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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&lt;210&gt; 3054

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3054

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		20						25					30		
Thr	Val	Lys	Asp	Gly	Leu	Ser	Leu	Gln	Phe	Lys	Arg	Phe	Arg	Glu	Thr
		35					40					45			
Val	Pro	Thr	Trp	Asp	Thr	Ile	Arg	Asp	Glu	Glu	Asp	Val	Leu	Asp	Glu
	50					55					60				
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Gly	Ile	Ser	Leu	Asn	Ile	Pro	Ala	Pro	Gln	Pro	Val	Cys	Ile	Ser	Glu
			85					90					95		
Lys	Gln	Glu	Asn	Asp	Val	Ile	Asn	Ala	Ile	Leu	Lys	Gln	His	Thr	Glu
			100					105					110		
Glu	Lys	Glu	Phe	Val	Glu	Lys	His	Phe	Asn	Asp	Leu	Asn	Met	Lys	Ala
		115					120						125		
Val	Glu	Gln	Asp	Glu	Pro	Ile	Pro	Gln	Lys	Pro	Gln	Ser	Ala	Phe	Tyr
		130				135					140				
Tyr	Cys	Arg	Leu	Leu	Leu	Ser	Ile	Leu	Gly	Met	Asn	Ser	Trp	Asp	Lys
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Asn	Thr Gly Gly Ser Gln Ala Tyr Glu Asp Phe Val Ala Gly Leu Gly				
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Trp	Glu Val Asn Leu Thr Asn His Cys Gly Phe Met Gly Gly Leu Gln				
	225		230		235
Lys	Asn Lys Ser Thr Gly Leu Thr Thr Pro Tyr Phe Ala Thr Ser Thr				
	245		250		255
Val	Glu Val Ile Phe His Val Ser Thr Arg Met Pro Ser Asp Ser Asp				
	260		265		270
Asp	Ser Leu Thr Lys Lys Leu Arg His Leu Gly Asn Asp Glu Val His				
	275		280		285
Ile	Val Trp Ser Glu His Thr Arg Asp Tyr Arg Arg Gly Ile Ile Pro				
	290		295		300
Thr	Glu Phe Gly Asp Val Leu Ile Val Ile Tyr Pro Met Lys Asn His				
	305		310		315
Met	Phe Ser Ile Gln Ile Met Lys Lys Pro Glu Val Pro Phe Phe Gly				
	325		330		335
Pro	Leu Phe Asp Gly Ala Ile Val Asn Gly Lys Val Leu Pro Ile Met				
	340		345		350
Val	Arg Ala Thr Ala Ile Asn Ala Ser Arg Ala Leu Lys Ser Leu Ile				
	355		360		365
Pro	Leu Tyr Gln Asn Phe Tyr Glu Glu Arg Ala Arg Tyr Leu Gln Thr				
	370		375		380
Ile	Val Gln His His Leu Glu Pro Thr Thr Phe Glu Asp Phe Ala Ala				
	385		390		395
Gln	Val Phe Ser Pro Ala Pro Tyr His His Leu Pro Ser Asp Ala Asp				
	405		410		415
His					

&lt;210&gt; 3055

&lt;211&gt; 905

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3055

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&lt;210&gt; 3056

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3056

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			20					25					30		
Cys	Ile	Phe	Tyr	Asp	Glu	Asn	Thr	Lys	His	Tyr	Glu	Leu	Leu	Asn	Tyr
		35					40					45			
Ser	Glu	His	Gly	Thr	Thr	Val	Asp	Asn	Val	Leu	Tyr	Ser	Cys	Asp	Phe
	50					55				60					
Ser	Glu	Lys	Thr	Pro	Pro	Thr	Pro	Pro	Ser	Ser	Ile	Val	Ala	Lys	Val
65					70				75					80	
Gln	Ser	Val	Ile	Arg	Arg	Arg	Arg	His	Gln	Lys	Gln	Asp	Glu	Glu	Pro
			85					90					95		
Ser	Glu	Glu	Ala	Ala	Met	Met	Ser	Ser	Gln	Ala	Gln	Gly	Pro	Gln	Arg
		100						105					110		
Arg	Pro	Cys	Asn	Cys	Lys	Ala	Ser	Ser	Ser	Ser	Leu	Ile	Gly	Gly	Ser
		115					120					125			
Gly	Ala	Gly	Trp	Glu	Gly	Thr	Ala	Leu	Leu	His	His	Gly	Ser	Tyr	Ile
	130					135					140				
Lys	Leu	Gly	Cys	Leu	Gln	Phe	Val	Phe	Ser	Ile	Thr	Glu	Phe	Ala	Thr
145					150				155					160	
Lys	Gln	Pro	Lys	Gly	Asp	Ala	Ser	Leu	Leu	Gln	Asp	Gly	Val	Leu	Ala
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Glu	Lys	Leu	Ser	Leu	Lys	Pro	His	Gln	Gly	Pro	Val	Leu	Arg	Ser	Asn
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		195													

&lt;210&gt; 3057

&lt;211&gt; 2169

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 3058

&lt;211&gt; 298

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3058

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			20					25					30		
Ala	Arg	Arg	Ala	Arg	Lys	Val	Phe	Thr	Val	Ile	Glu	Pro	Val	Asp	Ile
			35				40					45			
Asn	Thr	Pro	Ala	Leu	Leu	Ala	Pro	Gln	Ala	Gly	Ala	Arg	Glu	Lys	Val
	50					55				60					
Ala	Arg	Ser	Trp	Tyr	Cys	Asn	Arg	Gly	Leu	Val	Ser	Leu	Ser	Ala	Lys
65				70				75						80	
Ile	Asp	Arg	Lys	Gly	Tyr	Thr	Pro	Gly	Glu	Val	Ile	Pro	Val	Phe	Ala
			85					90					95		
Glu	Ile	Asp	Asn	Gly	Ser	Thr	Arg	Pro	Val	Leu	Pro	Arg	Ala	Ala	Val
			100					105					110		
Val	Gln	Thr	Gln	Thr	Phe	Met	Ala	Arg	Gly	Ala	Arg	Lys	Gln	Lys	Arg
		115				120						125			
Ala	Val	Val	Ala	Ser	Leu	Ala	Gly	Glu	Pro	Val	Gly	Pro	Gly	Gln	Arg
	130					135					140				
Ala	Leu	Trp	Gln	Gly	Arg	Ala	Leu	Arg	Ile	Pro	Pro	Val	Gly	Pro	Ser
145				150				155						160	
Ile	Leu	His	Cys	Arg	Val	Leu	His	Val	Asp	Tyr	Ala	Leu	Lys	Val	Cys
			165					170					175		
Val	Asp	Ile	Pro	Gly	Thr	Ser	Lys	Leu	Leu	Leu	Glu	Leu	Pro	Leu	Val
			180					185					190		
Ile	Gly	Thr	Ile	Pro	Leu	His	Pro	Phe	Gly	Ser	Arg	Ser	Ser	Ser	Val

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Gly	Ser	His	Ala	Ser	Phe	Leu	Leu	Asp	Trp	Arg	Leu	Gly	Ala	Leu	Pro
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Glu	Arg	Pro	Glu	Ala	Pro	Pro	Glu	Tyr	Ser	Glu	Val	Val	Ala	Asp	Thr
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				245					250					255	
Asp	Met	Ser	Leu	Glu	Gly	Pro	Phe	Phe	Ala	Tyr	Ile	Gln	Glu	Phe	Arg
			260					265					270		
Tyr	Arg	Pro	Pro	Pro	Leu	Tyr	Ser	Glu	Glu	Asp	Pro	Asn	Pro	Leu	Leu
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290						295									

&lt;210&gt; 3059

&lt;211&gt; 1411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3059

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1020

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<210> 3060

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Gly	Lys	Ser	Tyr	Arg	Val	85	90	95	
Gln	Arg	Ser	Arg	Ser	Lys	Ser	Arg	Thr	Arg	Arg	Ser	Arg	Ser	Arg	Pro	100	105	110	
Arg	Leu	Arg	Ser	His	Ser	Arg	Ser	Ser	Glu	Arg	Ser	Ser	His	Arg	Arg	115	120	125	
Thr	Arg	Ser	Arg	Ser	Arg	Asp	Arg	Glu	Arg	Arg	Lys	Gly	Arg	Asp	Lys	130	135	140	
Glu	Lys	Arg	Glu	Lys	Glu	Lys	Asp	Lys	Gly	Lys	Asp	Lys	Glu	Leu	His	145	150	155	160
Asn	Ile	Lys	Arg	Gly	Glu	Ser	Gly	Asn	Ile	Lys	Ala	Gly	Leu	Glu	His	165	170	175	
Leu	Pro	Pro	Ala	Glu	Gln	Ala	Lys	Ala	Arg	Leu	Gln	Leu	Val	Leu	Glu	180	185	190	
Ala	Ala	Ala	Lys	Ala	Asp	Glu	Ala	Leu	Lys	Ala	Lys	Glu	Arg	Asn	Glu	195	200	205	
Glu	Glu	Ala	Lys	Arg	Arg	Lys	Glu	Glu	Asp	Gln	Ala	Thr	Leu	Val	Glu	210	215	220	
Gln	Val	Lys	Arg	Val	Lys	Glu	Ile	Glu	Ala	Ile	Glu	Ser	Asp	Ser	Phe	225	230	235	240
Val	Gln	Gln	Thr	Phe	Arg	Ser	Ser	Lys	Glu	Val	Lys	Lys	Ser	Val	Glu	245	250	255	
Pro	Ser	Glu	Val	Lys	Gln	Ala	Thr	Ser	Thr	Ser	Gly	Pro	Ala	Ser	Ala				

	260		265		270										
Val	Ala	Asp	Pro	Pro	Ser	Thr	Glu	Lys	Glu	Ile	Asp	Pro	Thr	Ser	Ile
	275		280		285										
Pro	Thr	Ala	Ile	Lys	Tyr	Gln	Asp	Asp	Asn	Ser	Leu	Ala	His	Pro	Asn
	290		295		300										
Leu	Phe	Ile	Glu	Lys	Ala	Asp	Ala	Glu	Glu	Lys	Trp	Phe	Lys	Arg	Leu
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Ile	Ala	Leu	Arg	Gln	Glu	Arg	Leu	Met	Gly	Ser	Pro	Val	Ala		
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&lt;210&gt; 3061

&lt;211&gt; 1554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3061

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<210> 3062

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3062

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Phe	Lys	Met	Leu	Gln	Glu	Asn	Arg	Glu	Gly	Arg	Ala	Ala	Pro	Arg	Gln
			20					25					30		
Ser	Ser	Ser	Phe	Arg	Leu	Leu	Gln	Glu	Ala	Leu	Glu	Ala	Glu	Glu	Arg
		35					40					45			
Gly	Gly	Thr	Pro	Ala	Phe	Leu	Pro	Ser	Ser	Leu	Ser	Pro	Gln	Ser	Ser
	50					55					60				
Leu	Pro	Ala	Ser	Arg	Ala	Leu	Ala	Thr	Pro	Pro	Lys	Leu	His	Thr	Cys
65					70					75				80	
Glu	Lys	Cys	Ser	Thr	Ser	Ile	Ala	Asn	Gln	Ala	Val	Arg	Ile	Gln	Glu
				85					90					95	
Gly	Arg	Tyr	Arg	His	Pro	Gly	Cys	Tyr	Thr	Cys	Ala	Asp	Cys	Gly	Leu
			100				105					110			
Asn	Leu	Lys	Met	Arg	Gly	His	Phe	Trp	Val	Gly	Asp	Glu	Leu	Tyr	Cys
		115					120					125			
Glu	Lys	His	Ala	Arg	Gln	Arg	Tyr	Ser	Ala	Pro	Ala	Thr	Leu	Ser	Ser
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Arg	Ala														
145															

<210> 3063

<211> 386

<212> DNA

<213> Homo sapiens

<400> 3063

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 120  
 ttacactcca gggatctgca ctccatgata gtggcagctt ttcagtgtct ctgtgtctgg  
 180



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 240  
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<210> 3064

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3064

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Ser	Gly	Asp	Arg	Lys	Arg	Ala	Ile	Ser	Ser	Val	Cys	Thr	Tyr	Ile
			20				25					30		
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His
		35					40					45		
Met	Ile	Val	Ala	Ala	Phe	Gln	Cys	Leu	Cys	Val	Trp	Leu	Thr	Glu
	50					55				60				
Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu
	65				70				75				80	
Val	Glu	Leu	Gly	Ile	Ser	Gly	Ser	Lys	Ser	Lys	Asn	Asn	Glu	Gln
			85					90					95	
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg
			100					105					110	
Lys	Asp	Ala	Ala	Glu	Ala	Thr	Leu	Thr	Trp	Tyr	Gly	Ser	Asp	Arg
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<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

<400> 3065

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 120  
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 180  
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720  
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1260  
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1320  
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1380  
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1920  
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1980  
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2100

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2104

<210> 3066  
<211> 183  
<212> PRT  
<213> Homo sapiens

<400> 3066  
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Leu Gln Gly Glu His Ser Gln Asn Gly Glu Glu Glu Pro Glu Thr Glu  
35 40 45  
Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa  
50 55 60  
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly  
65 70 75 80  
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu  
85 90 95  
Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Glu Asn  
100 105 110  
Arg Ile Pro Gln Pro Pro Pro Ile Ala His Pro Arg Thr Ser Pro Gln  
115 120 125  
Pro Glu Ser Gly Ile Lys Arg Leu Phe Ser Phe Phe Ser Arg Asp Lys  
130 135 140  
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe  
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165 170 175  
Gln Glu Ala Leu Gln His Leu  
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<210> 3067  
<211> 645  
<212> DNA  
<213> Homo sapiens

<400> 3067  
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240  
aagtcagacc cacccccacc cccaccagga aaattcaagt ccttcctccc accgaggagc  
300  
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360  
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420

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<210> 3068

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3068

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Pro	Pro	Ala	Ala	Met	Ser	Gly	Ser	Pro	Ala	Pro	Lys	Ala	Gly	Tyr	Ala
		20						25				30			
Ser	Pro	Asn	Arg	Ala	Gln	Gly	Pro	Ser	Xaa	Val	Leu	Val	His	Gln	Ala
		35					40					45			
Arg	Glu	Pro	Thr	Ala	Gly	Ser	Pro	Pro	Cys	Ser	Leu	Pro	Arg	Pro	Asp
	50					55					60				
Leu	Gln	Pro	Pro	Ser	Thr	Pro	Pro	Pro	Pro	Val	His	Lys	Glu	Gln	Lys
65				70						75				80	
Lys	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Gly	Lys	Phe	Lys	Ser	Phe	Leu	
		85						90					95		
Pro	Pro	Arg	Ser	Pro	Gly	Asn	Ser	Ala	Leu	Gly	Pro	Arg	Arg	Gly	Trp
		100					105						110		
Gly	Trp	Ile	Ala	Ala	Gly	Gly	Ala	Pro	Ala	Met	Pro	Arg	Pro	Pro	Ser
	115						120					125			
Gly	Ala	Gly	Asp	Arg	Glu	Ile	Pro	Arg	Asp	Leu	Ala	Cys	Ala	Pro	Tyr
130						135					140				
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145				150					155					160	
Arg	Arg	Cys	Gly	Ser	Lys	Glu	Pro	Glu	Ala	Ala	Ser	Arg	Pro	Pro	
		165						170					175		
Ser	Pro	Ala	Glu	Glu	Pro	Pro	Pro	Val	Ser	Ala	Glu	Glu	Thr	Pro	
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<210> 3069

<211> 1561

<212> DNA

<213> Homo sapiens

<400> 3069

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 180

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420  
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480  
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720  
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&lt;210&gt; 3070

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3070

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 20 25 30  
 Leu Gly Ser Ser Val Leu His Trp Gly Tyr Leu Pro Ser Lys Asp Asp  
 35 40 45  
 Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys  
 50 55 60  
 His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys  
 65 70 75 80  
 Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala  
 85 90 95  
 Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn  
 100 105 110  
 Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu  
 115 120 125  
 Ile Ala Pro Phe Ser Trp Ala Ala Leu His Gly Lys Phe Arg Ser Leu  
 130 135 140  
 Leu Thr Thr Glu Pro Arg Glu Asp Leu  
 145 150

&lt;210&gt; 3071

&lt;211&gt; 3343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3071

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900  
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1080  
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1140  
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&lt;210&gt; 3072

&lt;211&gt; 349

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3072

Met	Leu	Glu	Arg	Arg	Cys	Arg	Gly	Pro	Leu	Ala	Met	Gly	Leu	Ala	Gln
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Pro	Arg	Leu	Leu	Ser	Gly	Pro	Ser	Gln	Glu	Ser	Pro	Gln	Thr	Leu	Gly
			20					25					30		
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
			35				40					45			
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
			50				55				60				
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
65					70					75				80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
				85						90				95	
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
				100						105				110	
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp



115	120	125
Val Ala Leu Val Leu His Leu Arg Ala His Ser Ala Ala Lys Arg Pro		
130	135	140
Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu		
145	150	155
Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro		
165	170	175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu		
180	185	190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala		
195	200	205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala		
210	215	220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys		
225	230	235
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg		
245	250	255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg		
260	265	270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly		
275	280	285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys		
290	295	300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly		
305	310	315
Arg Pro Arg Pro Pro Ala Arg Gly Ala Pro Ser Cys Gln Pro Ala		
325	330	335
Pro Arg Ser Pro Arg Pro Ser Pro Pro Arg Arg Tyr Leu		
340	345	

&lt;210&gt; 3073

&lt;211&gt; 791

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3073

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 180  
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 240  
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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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		20					25					30			
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
		35				40					45				
Ala	Pro	Gly	Pro	His	Leu	Pro	Pro	Arg	Gly	Ser	Val	Pro	Gly	Asp	Pro
	50					55					60				
Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
65					70				75					80	
Ile	Trp	Ser	Val	Glu	Ser	Asp	Asp	Pro	Asn	Leu	Ala	Ala	Val	Leu	Glu
			85						90					95	
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
		100					105						110		
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
		115				120						125			
Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr
	130					135					140				
Gln	Glu	Asp	Val	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Glu	Met	Pro	Glu	Asp
145				150					155					160	
Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
			165						170					175	
Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
			180				185						190		
Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn	Gly	Ala
		195				200						205			
Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
	210					215					220				
Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225				230						235				240	
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
			245						250					255	
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<210> 3075

<211> 603

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3075

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ccg
603

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&lt;210&gt; 3076

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3076

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Pro Pro Pro Pro Phe Phe Ser Pro Val Gly Ala Lys Lys Lys Asn
20     25     30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35     40     45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50     55     60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65     70     75     80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85     90     95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100    105    110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115    120    125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130    135    140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
145    150    155    160
Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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				165					170				175
Ile	Lys	Ile	Ile	Asp	Phe	Gly	Leu	Ala	Arg	Arg	Tyr	Lys	Pro
				180				185				190	Glu
Lys	Leu	Lys	Val	Asn	Phe	Gly	Thr	Pro					
			195				200						

&lt;210&gt; 3077

&lt;211&gt; 1377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3077

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120

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gagcgcttgg gtgtgggggg ccgcacggta ggcgccctgc cccgcggggc ccgccagaac  
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1260

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1320

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1377

<210> 3078

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3078

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Glu	Ala	Val	Gln	Ala	Leu	Arg	Glu	Arg	Leu	Gly	Val	Gly	Gly	Arg	Thr
			20					25					30		
Val	Gly	Ala	Leu	Pro	Arg	Gly	Pro	Arg	Gln	Asn	Ser	Arg	Leu	Gly	Leu
	35					40					45				
Pro	Leu	Leu	Leu	Met	Pro	Glu	Glu	Ala	Arg	Leu	Leu	Ala	Glu	Ile	Gly
	50				55					60					
Ala	Val	Thr	Leu	Val	Ser	Ala	Pro	Arg	Pro	Asp	Ser	Arg	His	His	Ser
65					70				75					80	
Leu	Ala	Leu	Thr	Ser	Phe	Lys	Arg	Gln	Gln	Glu	Glu	Ser	Phe	Gln	Glu
			85					90						95	
Gln	Ser	Ala	Leu	Ala	Ala	Glu	Ala	Arg	Glu	Thr	Arg	Arg	Gln	Glu	Leu
		100					105						110		
Leu	Glu	Lys	Ile	Thr	Glu	Gly	Gln	Ala	Ala	Lys	Lys	Gln	Lys	Leu	Glu
	115					120						125			
Gln	Ala	Ser	Gly	Ala	Ser	Ser	Gln	Glu	Ala	Gly	Ser	Ser	Gln	Ala	
	130				135					140					
Ala	Lys	Glu	Asp	Glu	Thr	Ser	Asp	Gly	Gln	Ala	Ser	Gly	Glu	Gln	Glu
145				150					155					160	
Glu	Ala	Gly	Pro	Ser	Ser	Ser	Gln	Ala	Gly	Pro	Ser	Asn	Gly	Val	Ala
			165					170					175		
Pro	Leu	Pro	Arg	Ser	Ala	Leu	Leu	Val	Gln	Leu	Ala	Thr	Ala	Arg	Pro
	180					185						190			
Arg	Pro	Val	Lys	Ala	Arg	Pro	Leu	Asp	Trp	Arg	Val	Gln	Ser	Lys	Asp
	195					200					205				
Trp	Pro	His	Ala	Gly	Arg	Pro	Ala	His	Glu	Leu	Arg	Tyr	Ser	Ile	Tyr
	210				215						220				
Arg	Asp	Leu	Trp	Glu	Arg	Gly	Phe	Phe	Leu	Ser	Ala	Ala	Gly	Lys	Phe
225				230					235					240	
Gly	Gly	Asp	Phe	Leu	Val	Tyr	Pro	Gly	Asp	Pro	Leu	Arg	Phe	His	Ala
			245					250					255		
His	Tyr	Ile	Ala	Gln	Cys	Trp	Ala	Pro	Glu	Asp	Thr	Ile	Pro	Leu	Gln
	260					265						270			
Asp	Leu	Val	Ala	Ala	Gly	Arg	Leu	Gly	Thr	Ser	Val	Arg	Lys	Thr	Leu
	275					280					285				
Leu	Leu	Cys	Ser	Pro	Gln	Pro	Asp	Gly	Lys	Val	Val	Tyr	Thr	Ser	Leu
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Gln	Trp	Ala	Ser	Leu	Gln										
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<210> 3079

<211> 1785

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3079

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<210> 3080

<211> 500

<212> PRT

<213> Homo sapiens

<400> 3080

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Cys	Ser	Pro	Thr	Pro	Pro	Pro	Val	Pro	Arg	Arg	Gly	Thr	His	Thr	Thr	20	25	30	
Val	Ser	Gln	Val	Gln	Pro	Pro	Pro	Ser	Lys	Ala	Ser	Ala	Pro	Glu	Pro	35	40	45	
Pro	Ala	Glu	Glu	Glu	Val	Ala	Thr	Gly	Thr	Thr	Ser	Ala	Ser	Asp	Asp	50	55	60	
Leu	Glu	Ala	Leu	Gly	Thr	Leu	Ser	Leu	Gly	Thr	Thr	Glu	Glu	Lys	Ala	65	70	75	80
Ala	Ala	Glu	Ala	Ala	Val	Pro	Arg	Thr	Ile	Gly	Ala	Glu	Leu	Met	Glu	85	90		95
Leu	Val	Arg	Arg	Asn	Thr	Gly	Leu	Ser	His	Glu	Leu	Cys	Arg	Val	Ala	100	105		110
Ile	Gly	Ile	Ile	Val	Gly	His	Ile	Gln	Ala	Ser	Val	Pro	Ala	Ser	Ser	115	120		125
Pro	Val	Met	Glu	Gln	Val	Leu	Ser	Leu	Val	Glu	Gly	Lys	Asp	Leu		130	135		140
Ser	Met	Ala	Leu	Pro	Ser	Gly	Gln	Val	Cys	His	Asp	Gln	Gln	Arg	Leu	145	150		155
Glu	Val	Ile	Phe	Ala	Asp	Leu	Ala	Arg	Arg	Lys	Asp	Asp	Ala	Gln	Gln	165	170		175
Arg	Ser	Trp	Ala	Leu	Tyr	Glu	Asp	Glu	Gly	Val	Ile	Arg	Cys	Tyr	Leu	180	185		190
Glu	Glu	Leu	His	Ile	Leu	Thr	Asp	Ala	Asp	Pro	Glu	Val	Cys	Lys		195	200		205
Lys	Met	Cys	Lys	Arg	Asn	Glu	Phe	Glu	Ser	Val	Leu	Ala	Leu	Val	Ala	210	215		220
Tyr	Tyr	Gln	Met	Glu	His	Arg	Ala	Ser	Leu	Arg	Leu	Leu	Leu	Lys		225	230		235
Cys	Phe	Gly	Ala	Met	Cys	Ser	Leu	Asp	Ala	Ala	Ile	Ile	Ser	Thr	Leu	245	250		255
Val	Ser	Ser	Val	Leu	Pro	Val	Glu	Leu	Ala	Arg	Asp	Met	Gln	Thr	Asp	260	265		270
Thr	Gln	Asp	His	Gln	Lys	Leu	Cys	Tyr	Ser	Ala	Leu	Ile	Leu	Ala	Met	275	280		285
Val	Phe	Ser	Met	Gly	Glu	Ala	Val	Pro	Tyr	Ala	His	Tyr	Glu	His	Leu				

290 295 300  
 Gly Thr Pro Phe Ala Gln Phe Leu Leu Asn Ile Val Glu Asp Gly Leu  
 305 310 315 320  
 Pro Leu Asp Thr Thr Glu Gln Leu Pro Asp Leu Cys Val Asn Leu Leu  
 325 330 335  
 Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met  
 340 345 350  
 Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu  
 355 360 365  
 Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His  
 370 375 380  
 Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe  
 385 390 395 400  
 Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala  
 405 410 415  
 Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp  
 420 425 430  
 Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg  
 435 440 445  
 Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu  
 450 455 460  
 Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro  
 465 470 475 480  
 Arg Pro Leu His Pro Ala Leu Gln Leu Val Ile Asp Ser Ala Phe Gly  
 485 490 495  
 Gly Arg Ser Val  
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&lt;210&gt; 3081

&lt;211&gt; 1902

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3081

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 ccacatggcg acgaacttgt ggacggacac ggagcccggt cgctcccccc ggccacgagc  
 120  
 caaagcattc cgaccttcta ctccccaga ggacgccgcg aggactccgt caacgtggat  
 180  
 gccgtcatca gcaagatcga gagcaccttc gcccggttcc cccacgagag ggccaccatg  
 240  
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 360  
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 420  
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 480  
 aacacgcacc cggggctgtc gttcctgaag gaggcgtccg agttccactc gcgctacatc  
 540  
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 600



tgcgccgagc tgcggaggag ctcccttctg cagaatgtgg cgctgctgga ggaggaggcg  
 660  
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 720  
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 780  
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 840  
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 900  
 tctgaggaag acaaaaaaac accgaccagc atcgagtact ggttccgctg catggacctg  
 960  
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 1080  
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 1380  
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 1440  
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 1500  
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 1560  
 tgtggaaaat gagtgcgttt gtacggaatg ataaactttt atttattcac agaagcgtgt  
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 1680  
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 1740  
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 1800  
 accggcgct cccggcgcc tcagtcctgg acaggagcct ccaccacagg ctgtgtgaat  
 1860  
 gttttgtgta aacgtacaaa accgtttctg gcgatcacga aa  
 1902

&lt;210&gt; 3082

&lt;211&gt; 414

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3082

Met Asp Asp Met Gly Leu Val Ala Lys Ala Cys Gly Cys Pro Leu Tyr

1

5

10

15

Trp Lys Gly Pro Leu Phe Tyr Gly Ala Gly Gly Glu Arg Thr Gly Ser

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<210> 3083
<211> 610
<212> DNA
<213> Homo sapiens
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&lt;400&gt; 3083

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 120  
 gactgggcag gccgggcccc ggcaactggg ggtgacagtc atacttcgtg gagcccagcg  
 180  
 agcatccccg gcaagcacta ccaggctgtg ggtctgcacc tctggaaggt agagaagcgg  
 240  
 cgggtcaatc tgcttagggt cctgtccatg cccccgtgg ctggcaccgc gtgccatgca  
 300  
 tacgaccggg aggtccacct gcgttgtag ctctcaccgg gctactacct ggctgtcccc  
 360  
 agcaccttc tgaaggacgc gccaggggag ttctgtctcc gagtcttctc taccggggca  
 420  
 gtctccctta ggtgagagga accgcgcagt gctgctggct ctccgaggcc acaggccctt  
 480  
 ccaaggcagg atttgggcac ttccctctg tggttggcag gtgtccatgt gggaactgag  
 540  
 gccaccggga acctgctgcc agcgccctcc catgtttgtc ttcttggcag cgccatcagg  
 600  
 gcagtggcca  
 610

&lt;210&gt; 3084

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3084

Xaa	Arg	Pro	Ser	Cys	Trp	Glu	Pro	Val	Arg	Pro	Ser	Gly	Ser	Ser	His
1				5					10					15	
Leu	Ser	Trp	His	Arg	Gly	Pro	Pro	Cys	Glu	Val	Tyr	Ile	Ala	Val	Leu
			20					25					30		
Gln	Arg	Ser	Arg	Leu	His	Ala	Ala	Asp	Trp	Ala	Gly	Arg	Ala	Arg	Ala
		35					40					45			
Leu	Val	Gly	Asp	Ser	His	Thr	Ser	Trp	Ser	Pro	Ala	Ser	Ile	Pro	Gly
	50					55				60					
Lys	His	Tyr	Gln	Ala	Val	Gly	Leu	His	Leu	Trp	Lys	Val	Glu	Lys	Arg
65				70					75				80		
Arg	Val	Asn	Leu	Pro	Arg	Val	Leu	Ser	Met	Pro	Pro	Val	Ala	Gly	Thr
			85					90					95		
Ala	Cys	His	Ala	Tyr	Asp	Arg	Glu	Val	His	Leu	Arg	Cys	Glu	Leu	Ser
			100				105					110			
Pro	Gly	Tyr	Tyr	Leu	Ala	Val	Pro	Ser	Thr	Phe	Leu	Lys	Asp	Ala	Pro
		115					120					125			
Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe	Ser	Thr	Gly	Arg	Val	Ser	Leu	Arg
	130					135						140			

&lt;210&gt; 3085

&lt;211&gt; 1080

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3085

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 cttctccaat aagaagatat tcagatattg tagtaccocg cttgttaatg gcagccattt  
 120  
 caaaagataa gaaaatggaa attaagggaa atctgttcag caacaaagat cttgaggaat  
 180  
 tatgcagaca tatcaacaac agaaaccaag cagcacagca ttctcagaag cagtctactg  
 240  
 agctcttcca gtgcatgtac ttcaaagaca aagaccctgc caccgaggag cgttgcatat  
 300  
 ctgacggagt tatttattca attagaacaa atggtgtgct tctatttata ccaagggttg  
 360  
 ggattaaagg tgctgcttat ctaaaaata aagatggttt agtcatctca tgtggcccag  
 420  
 atagctgttc tgaatggaaa ccaggatccc ttcaacgatt tcaaaacaaa attacctcta  
 480  
 ctacaacaga tggggaatct gttacgttcc atttgtttga ccatgtaacc gtaagaatat  
 540  
 ccatacaggc ctcacgttgc cattctgata caatcagact tgaaataatt agtaacaaac  
 600  
 catacaagat accaaatata gaacttattc atcagagttc ccccttgctg aagagttagt  
 660  
 tagtgaaaga agtaactaaa tctgtggaag aagctcagct tgccaagaa gtcaaagtaa  
 720  
 acatcattca ggaggaatat caagaatata gccaaacaaa gggaggagc ctatacacac  
 780  
 ttctagagga gatacgggac ctactctcc tggatgttcc aaacaattat ggaatatgag  
 840  
 aggtctttac ttactaaga gctgtcatat gtgaatgttt tacagtcttt tcaaacttaa  
 900  
 catttaatgt gtgtcactca gtgcttagt cgatcaggac tgggtagcta tttcgcatat  
 960  
 atgtanaatg ttctcagccg ggcacgggtg ctcacgcctg taaccccagc actttgggag  
 1020  
 gctgaggcgg gcggatcacg aggtcaggag attgagacca tcttggttaa cacggtgaaa  
 1080

&lt;210&gt; 3086

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3086

Met	Cys	Val	Thr	Gln	Cys	Ser	Ser	Arg	Ser	Gly	Leu	Gly	Ser	Tyr	Phe
1				5				10						15	
Ala	Tyr	Met	Xaa	Asn	Val	Leu	Ser	Arg	Ala	Arg	Trp	Leu	Thr	Pro	Val
			20					25					30		
Thr	Pro	Ala	Leu	Trp	Glu	Ala	Glu	Ala	Gly	Gly	Ser	Arg	Gly	Gln	Glu
		35				40						45			
Ile	Glu	Thr	Ile	Leu	Ala	Asn	Thr	Val	Lys						
	50					55									

<210> 3087  
<211> 2329  
<212> DNA  
<213> Homo sapiens

<400> 3087  
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120  
gtggagggtg agccgcccc agatcggccg gtccgagcgt gccggacaca gcagccggaa  
180  
atggagcgca cccatattca gcaactcctg gaacacttcc tccgccagct tcagagaaaa  
240  
gatccccatg gattttttgc ttttcctgtc acggatgcaa ttgctcctgg atattcaatg  
300  
ataataaaac atcccatgga ttttggcacc atgaaagaca aaattgtagc taatgaatac  
360  
aagtcagtta cggaatttaa ggcagatttc aagctgatgt gtgataatgc aatgacatac  
420  
aataggccag ataccgtgta ctacaagttg gcgaagaaga tccttcacgc aggctttaag  
480  
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540  
cctgaagttg taccagtaca agtagaaact gccaaagaaat ccaaaaagcc gagtagagaa  
600  
gttatcagct gcatgtttga gcctgaaggg aatgcctgca gcttgacgga cagtaccgca  
660  
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720  
cggttcctcc caggcggaag gatgggctat ctgaagagga acggggacgg gagcctgctc  
780  
tacagcgtgg tcaacacggc cgagccgaac gctgatgagg aggagacca cccggtgact  
840  
tgagctcgct ctccagtaag ctactcccag gcttcaccac gctgggcttc aaagacgaga  
900  
gaagaaacaa agtcaccttt ctctccagtg ccactactgc gctttcgatg cagaataatt  
960  
cagtatttgg cgacttgaag tcggacgaga tggagctgct ctactcagcc tacggagatg  
1020  
agacaggcgt gcagtgtgag ctgagcctgc aggagtttgt gaaggatgct gggagctaca  
1080  
gcaagaaagt ggtggacgac ctctggacc agatcacagg cggagaccac tctaggacgc  
1140  
tcttccagct gaagcagaga agaaatgttc ccatgaagcc tccagatgaa gccaaaggttg  
1200  
gggacaccct aggagacagc agcagctctg ttctggagtt catgtcgatg aagtcctatc  
1260  
ccgacgtttc tgtggatata tccatgctca gctctctggg gaaggatgaag aaggagctgg  
1320  
accctgacga cagccatttg aacttgatg agacgacgaa gctcctgcag gacctgcacg  
1380  
aagcacaggc ggagcgcggc ggctctcggc cgtcgtccaa cctcagctcc ctgtccaacg  
1440

cctccgagag ggaccagcac cacctgggaa gcccttctcg cctgagtgtc ggggagcagc  
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 1560  
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 1620  
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 1680  
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 1800  
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 1860  
 catcgtgtca gcagagagag tctctgtaca cagccccgtg aacctgagg agtggagtca  
 1920  
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 1980  
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 2220  
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 2280  
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 2329

&lt;210&gt; 3088

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3088

Xaa Glu Lys His Leu Asp Asp Glu Glu Arg Arg Lys Arg Lys Glu Glu  
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 20 25 30  
 Asp Asp Phe Asp Pro Gly Lys Lys Val Glu Val Glu Pro Pro Asp  
 35 40 45  
 Arg Pro Val Arg Ala Cys Arg Thr Gln Gln Pro Glu Met Glu Arg Thr  
 50 55 60  
 His Ile Gln Gln Leu Leu Glu His Phe Leu Arg Gln Leu Gln Arg Lys  
 65 70 75 80  
 Asp Pro His Gly Phe Phe Ala Phe Pro Val Thr Asp Ala Ile Ala Pro  
 85 90 95  
 Gly Tyr Ser Met Ile Ile Lys His Pro Met Asp Phe Gly Thr Met Lys  
 100 105 110  
 Asp Lys Ile Val Ala Asn Glu Tyr Lys Ser Val Thr Glu Phe Lys Ala  
 115 120 125  
 Asp Phe Lys Leu Met Cys Asp Asn Ala Met Thr Tyr Asn Arg Pro Asp

130	135	140
Thr Val Tyr Tyr Lys Leu Ala Lys Lys Ile Leu His Ala Gly Phe Lys		
145	150	155
Met Met Ser Lys Gln Ala Ala Leu Leu Gly Asn Glu Asp Thr Ala Val		160
	165	170
Glu Glu Pro Val Pro Glu Val Val Pro Val Gln Val Glu Thr Ala Lys		175
	180	185
Lys Ser Lys Lys Pro Ser Arg Glu Val Ile Ser Cys Met Phe Glu Pro		190
	195	200
Glu Gly Asn Ala Cys Ser Leu Thr Asp Ser Thr Ala Glu Glu His Val		205
	210	215
Leu Ala Leu Val Glu His Ala Ala Asp Glu Ala Arg Asp Arg Ile Asn		220
225	230	235
Arg Phe Leu Pro Gly Lys Met Gly Tyr Leu Lys Arg Asn Gly Asp		240
	245	250
Gly Ser Leu Leu Tyr Ser Val Val Asn Thr Ala Glu Pro Asn Ala Asp		255
	260	265
Glu Glu Glu Thr His Pro Val Thr		270
	275	280

&lt;210&gt; 3089

&lt;211&gt; 722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3089

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120
gcccttacaa aggcggcaga ggggtgatta tcttcacctg aattttcaga gctctgtatt
180
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240
agagatgacc tagagagctt ccagcttgag ataagtgggt ttttaaaga gatggcctgt
300
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360
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420
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480
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540
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600
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660
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720
ca
722

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&lt;210&gt; 3090

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3090

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 1           5           10           15
Thr Ser Met Glu Gly Asp Val Leu Asp Thr Leu Glu Ala Leu Gly Tyr
      20           25           30
Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly
      35           40           45
Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser
      50           55           60
Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly
      65           70           75           80
Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys
      85           90           95
Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu
      100          105          110
Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Leu Phe Leu Ser
      115          120          125
Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn
      130          135          140
Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met
      145          150          155          160
Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His
      165          170          175
Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val
      180          185          190
Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser
      195          200          205
Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu
      210          215          220
Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val
      225          230          235          240

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&lt;210&gt; 3091

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3091

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120
cccagggcga ccccttctgc caagtgtccc aaaatgattg ctaaatgcct ggctccccc
180
ctctttgact ccattctctg gttccctctt tctgctgcca gtcccccga ctcttccctg
240
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300
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333

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<210> 3092  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 3092  
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 Ser Arg Lys Arg Glu Pro Arg Asp Gly Val Lys Glu Trp Gly Ser Gln  
 35 40 45  
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly  
 50 55 60  
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln  
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 85 90 95  
 Phe Pro Ser Ala Pro Phe Thr Arg  
 100

<210> 3093  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

<400> 3093  
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Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe
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Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly
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Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr
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&lt;210&gt; 3098

&lt;211&gt; 1359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3098

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 Tyr Ile Gln Ala Ser Lys Ala Arg Asp Gly Ala Ser Pro Phe Ile Ser  
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 Ser Thr Thr Glu Gly Glu Asn Phe Glu Gln Thr Pro Leu Arg Arg Thr  
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 Ala Phe Lys Thr Gln Ala Asp Pro Arg Glu Pro Gln Phe His Ala Phe  
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 Phe Tyr Glu Glu Val Thr Ser Lys Gln Ile Cys Ser Ala Met Gln Thr  
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Pro Arg Asn Ile Gly Lys Asp Gly Lys Phe Gln Met Leu Val Cys Leu		1280
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Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp		1295
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Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp		1310
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His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu		1325
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Ala Val Thr Lys Val Pro Ser Gln Ser Gly Val Gly Lys Pro Cys Trp		80
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	100	105
Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile		110
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Phe Pro Arg Tyr Leu Gly Thr Ser Met Lys Ala Leu Ile His Met Leu		125
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&lt;210&gt; 3101

&lt;211&gt; 2623

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3101

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 <212> PRT  
 <213> Homo sapiens

<400> 3102

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Gly Val Leu Asp Arg Arg Asp Ser Ala Ala Leu Arg Thr Pro Arg Lys
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Phe Tyr Tyr Ile Thr Leu Leu Arg Asp Pro Val Ser Arg Tyr Leu Ser
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Glu Trp Arg His Val Gln Arg Gly Ala Thr Trp Lys Thr Ser Leu His
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Met Cys Asp Gly Arg Thr Pro Thr Pro Glu Glu Leu Pro Pro Cys Tyr
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Glu Gly Thr Asp Trp Ser Gly Cys Thr Leu Gln Glu Phe Met Asp Cys
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Pro Tyr Asn Leu Ala Asn Asn Arg Gln Val Arg Met Leu Ala Asp Leu
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&lt;210&gt; 3103

&lt;211&gt; 1228

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3103

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 gctggggggc ggggcgtggc agggccctct ctgtgcctct cctcccaagt aggaaggggc  
 4560  
 tccgggtggc tgctctggga ctgggcaccc acaagggtc agtggggcca aacccttgaa  
 4620  
 atccgtgaaa ccgggtggtc ccaagagcta gaaactcagg aaaccccagg tgctcagggc  
 4680  
 cccgcgtctc gggggctccg tggggcagac cctgctaatt atatgcaatt ctccctcccc  
 4740  
 cagcccttcc ctgacccta agttattgcc cgctcacctc tcccaggccc caggccgcgg  
 4800  
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 4860  
 taaaggactt ttttaaatat atgtgccttt tgctacttc caaaaaaaaa aaaaaaaaaa  
 4920  
 aacc  
 4924

&lt;210&gt; 3106

&lt;211&gt; 1366

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3106

Met	Leu	Ala	Val	Gly	Pro	Ala	Met	Asp	Arg	Asp	Tyr	Pro	Gln	His	Glu
1				5				10					15		
Pro	Pro	Pro	Ala	Gly	Ser	Leu	Leu	Tyr	Ser	Pro	Pro	Pro	Leu	Gln	Ser
			20					25					30		
Ala	Met	Leu	His	Cys	Pro	Tyr	Trp	Asn	Thr	Phe	Ser	Leu	Pro	Pro	Tyr
			35					40				45			
Pro	Ala	Phe	Ser	Ser	Asp	Ser	Arg	Pro	Phe	Met	Ser	Ser	Ala	Ser	Phe
		50				55				60					
Leu	Gly	Ser	Gln	Pro	Cys	Pro	Asp	Thr	Ser	Tyr	Ala	Pro	Val	Ala	Thr
65					70					75				80	
Ala	Ser	Ser	Leu	Pro	Pro	Lys	Thr	Cys	Asp	Phe	Ala	Gln	Asp	Ser	Ser

	85		90		95
Tyr Phe Glu Asp Phe Ser Asn Ile Ser Ile Phe Ser Ser Ser Val Asp					
	100		105		110
Ser Leu Ser Asp Ile Val Asp Thr Pro Asp Phe Leu Pro Ala Asp Ser					
	115		120		125
Leu Asn Gln Val Ser Thr Ile Trp Asp Asp Asn Pro Ala Pro Ser Thr					
	130		135		140
His Asp Lys Leu Phe Gln Leu Ser Arg Pro Phe Ala Gly Phe Glu Asp					
	145		150		155
Phe Leu Pro Ser His Ser Thr Pro Leu Leu Val Ser Tyr Gln Glu Gln					
	165		170		175
Ser Val Gln Ser Gln Pro Glu Glu Glu Asp Glu Ala Glu Glu Glu Glu					
	180		185		190
Ala Glu Glu Leu Gly His Thr Glu Thr Tyr Ala Asp Tyr Val Pro Ser					
	195		200		205
Lys Ser Lys Ile Gly Lys Gln His Pro Asp Arg Val Val Glu Thr Ser					
	210		215		220
Thr Leu Ser Ser Val Pro Pro Pro Asp Ile Thr Tyr Thr Leu Ala Leu					
	225		230		235
Pro Ser Asp Ser Gly Ala Leu Ser Ala Leu Gln Leu Glu Ala Ile Thr					
	245		250		255
Tyr Ala Cys Gln Gln His Glu Val Leu Leu Pro Ser Gly Gln Arg Ala					
	260		265		270
Gly Phe Leu Ile Gly Asp Gly Ala Gly Val Gly Lys Gly Arg Thr Val					
	275		280		285
Ala Gly Val Ile Leu Glu Asn His Leu Arg Gly Arg Lys Lys Ala Leu					
	290		295		300
Trp Phe Ser Val Ser Asn Asp Leu Lys Tyr Asp Ala Glu Arg Asp Leu					
	305		310		315
Arg Asp Ile Glu Ala Thr Gly Ile Ala Val His Ala Leu Ser Lys Ile					
	325		330		335
Lys Tyr Gly Asp Thr Thr Thr Ser Glu Gly Val Leu Phe Ala Thr Tyr					
	340		345		350
Ser Ala Leu Ile Gly Glu Ser Gln Ala Gly Gly Gln His Arg Thr Arg					
	355		360		365
Leu Arg Gln Ile Leu Asp Trp Cys Gly Glu Ala Phe Glu Gly Val Ile					
	370		375		380
Val Phe Asp Glu Cys His Lys Ala Lys Asn Ala Gly Ser Thr Lys Met					
	385		390		395
Gly Lys Ala Val Leu Asp Leu Gln Asn Lys Leu Pro Leu Ala Arg Val					
	405		410		415
Val Tyr Ala Ser Ala Thr Gly Thr Ser Glu Pro Arg Asn Met Ile Tyr					
	420		425		430
Met Ser Arg Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Asn Phe					
	435		440		445
Glu Glu Phe Leu His Ala Ile Glu Lys Arg Gly Val Gly Ala Met Glu					
	450		455		460
Ile Val Ala Met Asp Met Lys Val Ser Gly Met Tyr Ile Ala Arg Gln					
	465		470		475
Leu Ser Phe Ser Gly Val Thr Phe Arg Ile Glu Glu Ile Pro Leu Ala					
	485		490		495
Pro Ala Phe Glu Cys Val Tyr Asn Arg Ala Ala Leu Leu Trp Ala Glu					
	500		505		510
Ala Leu Asn Val Phe Gln Gln Ala Ala Asp Trp Ile Gly Leu Glu Ser					

515	520	525
Arg Lys Ser Leu Trp Gly Gln Phe Trp Ser Ala His Gln Arg Phe Phe		
530	535	540
Lys Tyr Leu Cys Ile Ala Ala Lys Val Arg Arg Leu Val Glu Leu Ala		
545	550	555
Arg Glu Glu Leu Ala Arg Asp Lys Cys Val Val Ile Gly Leu Gln Ser		
565	570	575
Thr Gly Glu Ala Arg Thr Arg Glu Val Leu Gly Glu Asn Asp Gly His		
580	585	590
Leu Asn Cys Phe Val Ser Ala Ala Glu Gly Val Phe Leu Ser Leu Ile		
595	600	605
Gln Lys His Phe Pro Ser Thr Lys Arg Lys Arg Asp Arg Gly Ala Gly		
610	615	620
Ser Lys Arg Lys Arg Arg Pro Arg Gly Arg Gly Ala Lys Ala Pro Arg		
625	630	635
Leu Ala Cys Glu Thr Ala Gly Val Ile Arg Ile Ser Asp Asp Ser Ser		
645	650	655
Thr Glu Ser Asp Pro Gly Leu Asp Ser Asp Phe Asn Ser Ser Pro Glu		
660	665	670
Ser Leu Val Asp Asp Asp Val Val Ile Val Asp Ala Val Gly Leu Pro		
675	680	685
Ser Asp Asp Arg Gly Ser Leu Cys Leu Leu Gln Arg Asp Pro His Gly		
690	695	700
Pro Gly Val Leu Glu Arg Val Glu Arg Leu Lys Gln Asp Leu Leu Asp		
705	710	715
Lys Val Arg Arg Leu Gly Arg Glu Leu Pro Val Asn Thr Leu Asp Glu		
725	730	735
Leu Ile Asp Gln Leu Gly Gly Pro Gln Arg Val Ala Glu Met Thr Gly		
740	745	750
Arg Lys Gly Arg Val Val Ser Arg Pro Asp Gly Thr Val Ala Phe Glu		
755	760	765
Ser Arg Ala Glu Gln Gly Leu Ser Ile Asp His Val Asn Leu Arg Glu		
770	775	780
Lys Gln Arg Phe Met Ser Gly Glu Lys Leu Val Ala Ile Ile Ser Glu		
785	790	795
Ala Ser Ser Ser Gly Val Ser Leu Gln Ala Asp Arg Arg Val Gln Asn		
805	810	815
Gln Arg Arg Arg Val His Met Thr Leu Glu Leu Pro Trp Ser Ala Asp		
820	825	830
Arg Ala Ile Gln Gln Phe Gly Arg Thr His Arg Ser Asn Gln Val Ser		
835	840	845
Ala Pro Glu Tyr Val Phe Leu Ile Ser Glu Leu Ala Gly Glu Arg Arg		
850	855	860
Phe Ala Ser Ile Val Ala Lys Arg Leu Glu Ser Leu Gly Ala Leu Thr		
865	870	875
His Gly Asp Arg Arg Ala Thr Glu Ser Arg Asp Leu Ser Lys Tyr Asn		
885	890	895
Phe Glu Asn Lys Tyr Gly Thr Arg Ala Leu His Cys Val Leu Thr Thr		
900	905	910
Ile Leu Ser Gln Thr Glu Asn Lys Val Pro Val Pro Gln Gly Tyr Pro		
915	920	925
Gly Gly Val Pro Thr Phe Phe Arg Asp Met Lys Gln Gly Leu Leu Ser		
930	935	940
Val Gly Ile Gly Gly Arg Glu Ser Arg Asn Gly Cys Leu Asp Val Glu		

945                      950                      955                      960  
 Lys Asp Cys Ser Ile Thr Lys Phe Leu Asn Arg Ile Leu Gly Leu Glu  
                                  965                      970                      975  
 Val His Lys Gln Asn Ala Leu Phe Gln Tyr Phe Ser Asp Thr Phe Asp  
                                  980                      985                      990  
 His Leu Ile Glu Met Asp Lys Arg Glu Gly Lys Tyr Asp Met Gly Ile  
                                  995                      1000                      1005  
 Leu Asp Leu Ala Pro Gly Ile Glu Glu Ile Tyr Glu Glu Ser Gln Gln  
                                  1010                      1015                      1020  
 Val Phe Leu Ala Pro Gly His Pro Gln Asp Gly Gln Val Val Phe Tyr  
 1025                      1030                      1035                      1040  
 Lys Ile Ser Val Asp Arg Gly Leu Lys Trp Glu Asp Ala Phe Ala Lys  
                                  1045                      1050                      1055  
 Ser Leu Ala Leu Thr Gly Pro Tyr Asp Gly Phe Tyr Leu Ser Tyr Lys  
                                  1060                      1065                      1070  
 Val Arg Gly Asn Lys Pro Ser Cys Leu Leu Ala Glu Gln Asn Arg Gly  
                                  1075                      1080                      1085  
 Gln Phe Phe Thr Val Tyr Lys Pro Asn Ile Gly Arg Gln Ser Gln Leu  
                                  1090                      1095                      1100  
 Glu Ala Leu Asp Ser Leu Arg Arg Lys Phe His Arg Val Thr Ala Glu  
 1105                      1110                      1115                      1120  
 Glu Ala Lys Glu Pro Trp Glu Ser Gly Tyr Ala Leu Ser Leu Thr His  
                                  1125                      1130                      1135  
 Cys Ser His Ser Ala Trp Asn Arg His Cys Arg Leu Ala Gln Glu Gly  
                                  1140                      1145                      1150  
 Lys Asp Cys Leu Gln Gly Leu Arg Leu Arg His His Tyr Met Leu Cys  
                                  1155                      1160                      1165  
 Gly Ala Leu Leu Arg Val Trp Gly Arg Ile Ala Ala Val Met Ala Asp  
                                  1170                      1175                      1180  
 Val Ser Ser Ser Ser Tyr Leu Gln Ile Val Arg Leu Lys Thr Lys Asp  
 1185                      1190                      1195                      1200  
 Arg Lys Lys Gln Val Gly Ile Lys Ile Pro Glu Gly Cys Val Arg Arg  
                                  1205                      1210                      1215  
 Val Leu Gln Glu Leu Arg Leu Met Asp Ala Asp Val Lys Arg Arg Gln  
                                  1220                      1225                      1230  
 Ala Pro Ala Leu Gly Cys Pro Ala Pro Pro Ala Pro Arg Pro Leu Ala  
                                  1235                      1240                      1245  
 Leu Pro Cys Gly Pro Gly Glu Val Leu Asp Leu Thr Tyr Ser Pro Pro  
                                  1250                      1255                      1260  
 Ala Glu Ala Phe Pro Pro Pro Pro His Phe Ser Phe Pro Ala Pro Leu  
 1265                      1270                      1275                      1280  
 Ser Leu Asp Ala Gly Pro Gly Val Val Pro Leu Gly Thr Pro Asp Ala  
                                  1285                      1290                      1295  
 Gln Ala Asp Pro Ala Ala Leu Ala His Gln Gly Cys Asp Ile Asn Phe  
                                  1300                      1305                      1310  
 Lys Glu Val Leu Glu Asp Met Leu Arg Ser Leu His Ala Gly Pro Pro  
                                  1315                      1320                      1325  
 Ser Glu Gly Ala Leu Gly Glu Gly Ala Gly Ala Gly Gly Ala Ala Gly  
                                  1330                      1335                      1340  
 Gly Gly Pro Glu Arg Gln Ser Val Ile Gln Phe Ser Pro Pro Phe Pro  
 1345                      1350                      1355                      1360  
 Gly Ala Gln Ala Pro Leu  
                                  1365

&lt;210&gt; 3107

&lt;211&gt; 2102

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3107

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120  
caccagtttc tgatggagct gaagcaggaa gccctcacct ttgccaggaa ctggggggcc  
180  
gactatatcc tgtttgcaga cacagacaac attctgacca acaatcagac tctgcggctt  
240  
ctcatggggc aggggcttcc agtgggtggc ccaatgctgg actcccagac ctactactcc  
300  
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360  
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420  
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660  
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720  
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960  
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1020  
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1080  
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1140  
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1200  
ctgcgtctgg cgggtgcccc caagctgctg gcctcacagc ctctgcgccg catgctgccc  
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1320  
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1380  
tatgccgggg acgccgagtg gctcagtgac acggagacat cctctccatg ggatgatgac  
1440

agcggcgcgc tcacagctg gagcggtcc caaaagaccc tgcgcagccc ccgcctggac  
 1500  
 ctgactggca gcagcgggca cagcctccaa cccagcccc gagatgagct ctaggtccag  
 1560  
 gtgatgactg caaagcagt tccaggagca ggccactact gccagagag cagaggagga  
 1620  
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 1680  
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 1740  
 aaggtctcac agcaaaggag caggactccc aggcacctgt acctgcctg gcttgattca  
 1800  
 gggccttggt gccccagct tctgtttcaa gctgggcaga cccaggatc cttccctcc  
 1860  
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 1920  
 cagcttgatg tttgggtctc cccagcacc ccttccctgg ccggtgcaaa gtacagggag  
 1980  
 gtaaagcagg acccttgtag acatgttgcc cagcacacag taggcctca ataaaagcca  
 2040  
 tttgcacttt aaatatatat atgtatgtat atatatgtat atatatatat atatatatat  
 2100  
 gt  
 2102

&lt;210&gt; 3108

&lt;211&gt; 517

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3108

Met	Leu	Gln	Glu	Trp	Leu	Ala	Ala	Val	Gly	Asp	Asp	Tyr	Ala	Ala	Val
1				5					10					15	
Val	Trp	Arg	Pro	Glu	Gly	Glu	Pro	Arg	Phe	Tyr	Pro	Asp	Glu	Glu	Gly
			20					25					30		
Pro	Lys	His	Trp	Thr	Lys	Glu	Arg	His	Gln	Phe	Leu	Met	Glu	Leu	Lys
		35					40					45			
Gln	Glu	Ala	Leu	Thr	Phe	Ala	Arg	Asn	Trp	Gly	Ala	Asp	Tyr	Ile	Leu
		50				55					60				
Phe	Ala	Asp	Thr	Asp	Asn	Ile	Leu	Thr	Asn	Asn	Gln	Thr	Leu	Arg	Leu
65					70				75					80	
Leu	Met	Gly	Gln	Gly	Leu	Pro	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Gln
			85					90					95		
Thr	Tyr	Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Ile	Thr	Pro	Gln	Gly	Tyr	Tyr
			100					105					110		
Arg	Arg	Thr	Ala	Glu	Tyr	Phe	Pro	Thr	Lys	Asn	Arg	Gln	Arg	Arg	Gly
		115					120					125			
Cys	Phe	Arg	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ala	Ser	Leu	Arg
		130				135						140			
Ala	Glu	Gly	Ala	Asp	Gln	Leu	Ala	Phe	Tyr	Pro	Pro	His	Pro	Asn	Tyr
145					150					155				160	
Thr	Trp	Pro	Phe	Asp	Asp	Ile	Ile	Val	Phe	Ala	Tyr	Ala	Cys	Gln	Ala
				165				170						175	
Ala	Gly	Val	Ser	Val	His	Val	Cys	Asn	Glu	His	Arg	Tyr	Gly	Tyr	Met

180	185	190
Asn Val Pro Val Lys Ser His Gln Gly Leu Glu Asp Glu Arg Val Asn		
195	200	205
Phe Ile His Leu Ile Leu Glu Ala Leu Val Asp Gly Pro Arg Met Gln		
210	215	220
Ala Ser Ala His Val Thr Arg Pro Ser Lys Arg Pro Ser Lys Ile Gly		
225	230	235
Phe Asp Glu Val Phe Val Ile Ser Leu Ala Arg Arg Pro Asp Arg Arg		
245	250	255
Glu Arg Met Leu Ala Ser Leu Trp Glu Met Glu Ile Ser Gly Arg Val		
260	265	270
Val Asp Ala Val Asp Gly Trp Met Leu Asn Ser Ser Ala Ile Arg Asn		
275	280	285
Leu Gly Val Asp Leu Leu Pro Gly Tyr Gln Asp Pro Tyr Ser Gly Arg		
290	295	300
Thr Leu Thr Lys Gly Glu Val Gly Cys Phe Leu Ser His Tyr Ser Ile		
305	310	315
Trp Glu Glu Val Val Ala Arg Gly Leu Ala Arg Val Leu Val Phe Glu		
325	330	335
Asp Asp Val Arg Phe Glu Ser Asn Phe Arg Gly Arg Leu Glu Arg Leu		
340	345	350
Met Glu Asp Val Glu Ala Glu Lys Leu Ser Trp Asp Leu Ile Tyr Leu		
355	360	365
Gly Arg Lys Gln Val Asn Pro Glu Lys Glu Thr Ala Val Glu Gly Leu		
370	375	380
Pro Gly Leu Val Val Ala Gly Tyr Ser Tyr Trp Thr Leu Ala Tyr Ala		
385	390	395
Leu Arg Leu Ala Gly Ala Arg Lys Leu Leu Ala Ser Gln Pro Leu Arg		
405	410	415
Arg Met Leu Pro Val Asp Glu Phe Leu Pro Ile Met Phe Asp Gln His		
420	425	430
Pro Asn Glu Gln Tyr Lys Ala His Phe Trp Pro Arg Asp Leu Val Ala		
435	440	445
Phe Ser Ala Gln Pro Leu Leu Ala Ala Pro Thr His Tyr Ala Gly Asp		
450	455	460
Ala Glu Trp Leu Ser Asp Thr Glu Thr Ser Ser Pro Trp Asp Asp Asp		
465	470	475
Ser Gly Arg Leu Ile Ser Trp Ser Gly Ser Gln Lys Thr Leu Arg Ser		
485	490	495
Pro Arg Leu Asp Leu Thr Gly Ser Ser Gly His Ser Leu Gln Pro Gln		
500	505	510
Pro Arg Asp Glu Leu		
515		

&lt;210&gt; 3109

&lt;211&gt; 959

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3109

nnacgcgtcc ttttcaccaa gtctcctgaa cacacaaccg ggtgccactg gaagtgatcc

60

gcagcgcacc tgccctttgt taatacaaca tcaccttgct ccatatccta ccaaagatcc

120



cctggaatct ggaaggatct acttcactcg atccctccac agtcagcagg acaactttat  
 180  
 tccagtctgg gggacgcctt acccgagga gctgccaatc actgcagacg aagatgctca  
 240  
 cgtaatcttt gcagtcgcgc cgttctgccca gcgccatgta gcggccgtcc ctggtgaagg  
 300  
 tgattccctg cagactcgct ctccatcctg tgcgccatgt acaagcgagg gctggtgcag  
 360  
 gtctggtctt tagagcagcc cgaatggcac tgcaaatag acgagggctc agccgggctg  
 420  
 gtggcctcgt gctggagccc ggacggggcg caccattctca acaccacgga attccatctg  
 480  
 cggataaccg tctggtcctt gtgcacaaaa tccgtgtctt acatcaaata cccgaaagct  
 540  
 tgtctgcagg gaatcacctt caccagggac ggccgctaca tggcgctggc agaacggcgc  
 600  
 gactgcaaag attacgtgag catcttcgtc tgcagtgatt ggcagctcct gcggcatttt  
 660  
 gatacggaca cccaggatct cacagggatt gagtggggccc caaacggctg tgtgctggca  
 720  
 gtgtgggaca cctgcttggg gtacaagatt ctgctgtact cattggatgg ccggttggtg  
 780  
 tccacgtaca gcgctntacg agtggctcnn cttgggcatca agtctgtggc ctggagcccc  
 840  
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 900  
 acttggaata tgatcacgga gtttgggcat cctgcagcc ccataaatga ttcccaaaa  
 959

&lt;210&gt; 3110

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3110

Met	Tyr	Lys	Arg	Gly	Leu	Val	Gln	Val	Trp	Ser	Leu	Glu	Gln	Pro	Glu
1				5					10					15	
Trp	His	Cys	Lys	Ile	Asp	Glu	Gly	Ser	Ala	Gly	Leu	Val	Ala	Ser	Cys
			20					25					30		
Trp	Ser	Pro	Asp	Gly	Arg	His	Ile	Leu	Asn	Thr	Thr	Glu	Phe	His	Leu
			35				40					45			
Arg	Ile	Thr	Val	Trp	Ser	Leu	Cys	Thr	Lys	Ser	Val	Ser	Tyr	Ile	Lys
	50					55					60				
Tyr	Pro	Lys	Ala	Cys	Leu	Gln	Gly	Ile	Thr	Phe	Thr	Arg	Asp	Gly	Arg
65				70					75					80	
Tyr	Met	Ala	Leu	Ala	Glu	Arg	Arg	Asp	Cys	Lys	Asp	Tyr	Val	Ser	Ile
			85					90					95		
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100				105						110		
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
		115					120					125			
Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
	130					135					140				
Gly	Arg	Leu	Leu	Ser	Thr	Tyr	Ser	Ala	Xaa	Arg	Val	Val	Xaa	Leu	Gly

145		150		155		160									
Ile	Lys	Ser	Val	Ala	Trp	Ser	Pro	Ser	Ser	Gln	Phe	Leu	Ala	Val	Gly
		165				170								175	
Ser	Tyr	Asp	Gly	Lys	Val	Arg	Ile	Leu	Asn	His	Val	Thr	Trp	Lys	Met
		180					185						190		
Ile	Thr	Glu	Phe	Gly	His	Pro	Cys	Ser	Pro	Ile	Asn	Asp	Ser	Gln	
		195					200						205		

&lt;210&gt; 3111

&lt;211&gt; 1269

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3111

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tttttttttt tttttttttt tttttttttt tttttcttta acaaaatttt tatttaataa
60
atgggttaaaa tcgcagtgcc aaaaatacat tgacatttag caatttcact gaaaggaaga
120
aactacagaa tgcacggttt cagaaagcta ttttaagtta tttacaaata aagtatctaa
180
aactcaaaaa caggctctgt atgctatata tagtttatcc cttcccgaac aaaatttctg
240
ttatttgggc aaattcttaa accatggttt aaaccgtaat gggtacaaac cacaacaca
300
tccatccaga gactgaaacc gtttctatcc ggtcagtggc aaaactgttg aaagggaat
360
agttgaagct gttgggtttt atatagtgtg aactctgata aatattccta ccaggactaa
420
aacacagcac gctttgcggg catggctgac tcacaaaggt tgtaacaaac aagaactact
480
cttcactcga caccatggct cagaggccac cgagaagcac gagtgactga cagtcctct
540
gcttacaaac gaatgaaacc caaagtggat gtcgttctca cagcactgaa agtgcttcag
600
gactcacact gatccaatac taactttctt cctattttta cacatatttt tctactgtcc
660
agtggaaatc attttctgtt ttggctaaac aacaaatact agtttataac aggaatggta
720
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780
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840
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960
cgaaccttct gccttgacag tcttcccgtc tccgccacac tctcgcgtc ggaagcgagc
1020
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1080
tgctggactg tcgtcacacc tctgcgtctc tccagtctc tccatggcct cccccggagc
1140
cccgtgtccc tggtccccc tcttccctct gtcttgcca ggtccttccc cccatctctg
1200

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1260

gtcatccac

1269

<210> 3112

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3112

Met	Thr	Ala	Gly	Gly	Thr	Glu	Leu	Thr	Thr	Ser	Leu	Asn	Gly	Phe	Pro
1				5					10					15	
Glu	Gly	Val	Arg	Met	Ser	Arg	Asp	Gly	Gly	Lys	Asp	Leu	Ala	Lys	Thr
		20					25					30			
Glu	Gly	Arg	Arg	Gly	Ala	Arg	Thr	Ala	Gly	Leu	Arg	Gly	Arg	Pro	Trp
		35					40					45			
Arg	Asp	Trp	Glu	Glu	Arg	Arg	Gly	Val	Thr	Thr	Val	Gln	His	Pro	Glu
	50					55					60				
Lys	Ser	Asp	Trp	Gln	Thr	Arg	Thr	Gly	Gln	Pro	Cys	Ser	Cys	Met	Ile
65					70				75					80	
Gln	Glu	Leu	Ala	Ser	Glu	Arg	Glu	Ser	Val	Ala	Glu	Ala	Gly	Gly	Ser
			85					90					95		
Ala	Arg	Gln	Lys	Val	Arg	Gly	Leu	Val	Leu	Arg	Arg	Gly	Lys	Arg	Gln
			100					105					110		
Ser	Glu	Ser	Leu	His	Ala	Pro	Gly	Leu	His	Gly	Arg	Ala	Arg	Ala	Ser
		115					120					125			
Gln	Lys	Arg	Val	Asn	Asp	Pro	Glu	Cys	Asp	Trp	Glu	Gly	Glu	Leu	Ile
	130					135					140				
Pro	Tyr	Gln	Glu	Thr	Gly	Ser									
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<210> 3113

<211> 631

<212> DNA

<213> Homo sapiens

<400> 3113

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120  
ccaaaaggga aggagatagt aagcctgctg gaaagaaaca tcaccgtgac aatgtacatc  
180  
accatcgga cccggaactt gcagaaatat gtgagccgca cttcggttgt gtttgtctcc  
240  
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300  
aggtttcgat atgcaaatgc cagggatagg aaccagcgcc gactggggga tgcagcaaag  
360  
aaagccatca gcaaaactcca gatcaggacc atcaagaagg gtgacaagga aacagagtct  
420  
gattttgaca actgtgcagt ttgtattgaa ggttacaagc ccaatgacgt tgtccggatc  
480

ctgccctgcc ggcattcttt ccacaagtcc tgtgttgacc cctggcttct agaccatcgt  
 540  
 acctgtccca tgtgcaagat gaacattctt aaagccctag ggatccccc caatgccgac  
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 631

<210> 3114

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3114

Xaa	Ala	Phe	Leu	Gln	Asn	Ala	Ser	Ala	Val	Val	Ile	Phe	Asn	Val	Gly
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Ser	Asn	Thr	Asn	Glu	Thr	Ile	Thr	Met	Pro	His	Ala	Gly	Val	Glu	Asp
			20					25					30		
Ile	Val	Ala	Ile	Met	Ile	Pro	Glu	Pro	Lys	Gly	Lys	Glu	Ile	Val	Ser
		35					40					45			
Leu	Leu	Glu	Arg	Asn	Ile	Thr	Val	Thr	Met	Tyr	Ile	Thr	Ile	Gly	Thr
	50				55					60					
Arg	Asn	Leu	Gln	Lys	Tyr	Val	Ser	Arg	Thr	Ser	Val	Val	Phe	Val	Ser
65				70					75					80	
Ile	Ser	Phe	Ile	Val	Leu	Met	Ile	Ile	Ser	Leu	Ala	Trp	Leu	Val	Phe
		85						90					95		
Tyr	Tyr	Ile	Gln	Arg	Phe	Arg	Tyr	Ala	Asn	Ala	Arg	Asp	Arg	Asn	Gln
		100					105						110		
Arg	Arg	Leu	Gly	Asp	Ala	Ala	Lys	Lys	Ala	Ile	Ser	Lys	Leu	Gln	Ile
		115					120					125			
Arg	Thr	Ile	Lys	Lys	Gly	Asp	Lys	Glu	Thr	Glu	Ser	Asp	Phe	Asp	Asn
	130				135					140					
Cys	Ala	Val	Cys	Ile	Glu	Gly	Tyr	Lys	Pro	Asn	Asp	Val	Val	Arg	Ile
145				150					155					160	
Leu	Pro	Cys	Arg	His	Leu	Phe	His	Lys	Ser	Cys	Val	Asp	Pro	Trp	Leu
		165						170					175		
Leu	Asp	His	Arg	Thr	Cys	Pro	Met	Cys	Lys	Met	Asn	Ile	Leu	Lys	Ala
	180						185					190			
Leu	Gly	Ile	Pro	Pro	Asn	Ala	Asp	Cys	Met	Asp	Asp	Phe	Ala	Thr	Asp
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Phe	Glu														
	210														

<210> 3115

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 3115

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 120  
 gcagaaaaaga tggaaaaaag gacatgtgca ctctgcccc aagatgtcga atataatgtc  
 180

ctatactttg cacaatcaga gaatatagct gctcatgaga attgtttgct gtattcttca  
 240  
 ggacttgtagg aatgtgagga tcaggatcca cttaatcctg atagaagttt tgatgtggaa  
 300  
 tcagtaaaga aagaaatcca gagaggaagg aagttgaaat gcaaattttg tcataaaaga  
 360  
 ggagccaccg tgggatgtga tttaaaaaac tgtaacaaga attaccactt tttctgtgcc  
 420  
 aagaaggacg acgcagttcc acagtctgat ggagttcgag gaatttataa actgctttgc  
 480  
 cagcaacatg ctcaattccc gatcatcgct caaagtggta aattttcagg agtgaagaaga  
 540  
 aaaagaggaa ggaagaaacc cctctcaggc aatcatgtac agccaccgga aacaatgaaa  
 600  
 tgtaatacat tcataagaca agtgaaagaa gagcatggca gacacacaga tgcaactgtg  
 660  
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 720  
 aatattagac aaagttcatt caattccaga aaaactcatg gatgagacta cttcagaatc  
 780  
 agactatgaa gaaatcggga gtgcactttt tgactgtaga ttgttcgaag acacatttgt  
 840  
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 900  
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 960  
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 1020  
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 1080  
 aatccacaca tctttagaac tagtcgtctc ctcttggcct cagcagctct tccctgttct  
 1140  
 tactgggtga cattttgatc actctttgca cactcttggtg ttttttgtct actgtcacat  
 1200  
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 1260  
 ctttgattct acttacagcc catgatagcc tcttcttaga tataataaat ttggattata  
 1320  
 ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa  
 1366

&lt;210&gt; 3116

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3116

Met	Glu	Lys	Arg	Thr	Cys	Ala	Leu	Cys	Pro	Lys	Asp	Val	Glu	Tyr	Asn
1				5					10					15	
Val	Leu	Tyr	Phe	Ala	Gln	Ser	Glu	Asn	Ile	Ala	Ala	His	Glu	Asn	Cys
			20					25					30		
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
		35					40					45			
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

50		55		60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr				
65		70		80
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys				
	85		90	95
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile				
	100		105	110
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln				
	115		120	125
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro				
	130		135	140
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr				
145		150		155
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr				
	165		170	175
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser				
	180		185	190

&lt;210&gt; 3117

&lt;211&gt; 1373

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3117

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agcccagggg gcattcaacc ccatgtttct agaactctgt tcctgctgct gctggtggca
120
gcctcagcct ggggggtcac cctgagcccc aaagactgcc aggtgttcct ctcagaccat
180
ggcagctcca tctcctgtca accacctgcc gaaatccccg gctacctgcc agccgacacc
240
gtgcacctgg ccgtggaatt cttcaacctg acccacctgc cagccaacct cctccagggc
300
gcctctaagc tccaagaatt gcacctctcc agcaatgggc tggaaagcct ctcgcccga
360
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420
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480
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540
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600
cgacccttg accttgggga gaaccagttg gagaccttgc cacctgacct cctgaggggt
660
ccgctgcaat tagaacggt acatctagaa ggcaacaaat tgcaagtact gggaaaagat
720
ctcctcttgc cgcagccgga cctgcgtac ctcttctga gcggcaacaa gctggccagg
780
gtggcagccg gtgccttcca gggcctgcgg cagctggaca tgctggacct ctccaataac
840
tcactggcca gcgtgccga ggggctctgg gcatccctag ggcagccaaa ctgggacatg
900

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cgggatggct tcgacatctc cggcaacccc tggatctgtg accagaacct gagcgacctc  
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 1020  
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 1080  
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 1140  
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 1200  
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 1260  
 tctactaaaa atataaaaaa ttagccaggc gtggtggtgg gcacctgtag tcccagcaac  
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 1373

<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

Val	Thr	Leu	Ser	Pro	Lys	Asp	Cys	Gln	Val	Phe	Arg	Ser	Asp	His	Gly
1			5						10				15		
Ser	Ser	Ile	Ser	Cys	Gln	Pro	Pro	Ala	Glu	Ile	Pro	Gly	Tyr	Leu	Pro
		20						25				30			
Ala	Asp	Thr	Val	His	Leu	Ala	Val	Glu	Phe	Phe	Asn	Leu	Thr	His	Leu
	35					40					45				
Pro	Ala	Asn	Leu	Leu	Gln	Gly	Ala	Ser	Lys	Leu	Gln	Glu	Leu	His	Leu
	50				55					60					
Ser	Ser	Asn	Gly	Leu	Glu	Ser	Leu	Ser	Pro	Glu	Phe	Leu	Arg	Pro	Val
65				70				75				80			
Pro	Gln	Leu	Arg	Val	Leu	Asp	Leu	Thr	Arg	Asn	Ala	Leu	Thr	Gly	Leu
		85						90				95			
Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
		100						105				110			
Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
	115					120					125				
Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
	130				135					140					
Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
145				150					155				160		
Gly	Glu	Asn	Gln	Leu	Glu	Thr	Leu	Pro	Pro	Asp	Leu	Leu	Arg	Gly	Pro
		165						170				175			
Leu	Gln	Leu	Glu	Arg	Leu	His	Leu	Glu	Gly	Asn	Lys	Leu	Gln	Val	Leu
	180							185				190			
Gly	Lys	Asp	Leu	Leu	Leu	Pro	Gln	Pro	Asp	Leu	Arg	Tyr	Leu	Phe	Leu
	195					200						205			
Ser	Gly	Asn	Lys	Leu	Ala	Arg	Val	Ala	Ala	Gly	Ala	Phe	Gln	Gly	Leu
	210					215					220				
Arg	Gln	Leu	Asp	Met	Leu	Asp	Leu	Ser	Asn	Asn	Ser	Leu	Ala	Ser	Val
225				230					235				240		
Pro	Glu	Gly	Leu	Trp	Ala	Ser	Leu	Gly	Gln	Pro	Asn	Trp	Asp	Met	Arg

	245		250		255
Asp Gly Phe	Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp Gln Asn Leu				
	260		265		270
Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys Met Phe Ser					
	275		280		285
Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys Gly Gln Thr					
	290		295		300
Leu Leu Ala Val Ala Lys Ser Gln					
305		310			

&lt;210&gt; 3119

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3119

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60  
tcagcagagc gagccctagc tgctgctcag cgttgccata agaaggatgat gaaggagcgc  
120  
tacgtggagg tgggtccctg ttccacagag gagatgagcc gagtgctgat ggggggcacc  
180  
ttggggccga gtggcatgtc cctccaccc tgcaagctgc cctgcctctc accacctacc  
240  
tacaccacct tccaagccac cccaacgctc attcccacgg agacggcagc tctatacccc  
300  
tcttcagcac tgctcccagc tgccaggggtg cctgctgccc ccacctgtg tgctactat  
360  
ccagggccag ccaactcaact ctacctgaac tacacagcct actacccaag ccccgaagac  
420  
aacgcgt  
427

&lt;210&gt; 3120

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3120

Val His Met	Val Leu Asn Gln Gln Gly Arg Pro Ser Gly Asp Ala Phe
1	5 10 15
Ile Gln Met Thr Ser Ala Glu Arg Ala Leu Ala Ala Ala Gln Arg Cys	
	20 25 30
His Lys Lys Val Met Lys Glu Arg Tyr Val Glu Val Val Pro Cys Ser	
	35 40 45
Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser	
	50 55 60
Gly Met Ser Pro Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr	
65	70 75 80
Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala	
	85 90 95
Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala	
	100 105 110
Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr	



115 120 125  
 Leu Asn Tyr Thr Ala Tyr Tyr Pro Ser Pro Glu Asp Asn Ala  
 130 135 140

<210> 3121  
 <211> 284  
 <212> DNA  
 <213> Homo sapiens

<400> 3121  
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 60  
 atctgaggat ttctcaactt ctgcagcaac ttctgcagcc agctcacacg tgaggagaaa  
 120  
 taagaggaac atgaacctgg acggggcagc ttccattgtc cctctcctgc tcctgcta  
 180  
 gaacaaggcc tccccagagt atgaagagaa catgcacaga taccagaagg cagccaagct  
 240  
 cttccgggga agattctctt tattctggtg gacagtggta tgaa  
 284

<210> 3122  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 3122  
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 Gly Pro Ser Glu Asp Phe Ser Thr Ser Ala Ala Thr Ser Ala Ala Ser  
 20 25 30  
 Ser His Val Arg Arg Asn Lys Arg Asn Met Asn Leu Asp Gly Ala Ala  
 35 40 45  
 Ser Ile Val Pro Leu Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu  
 50 55 60  
 Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Lys Leu Phe Arg  
 65 70 75 80  
 Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val  
 85 90

<210> 3123  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 3123  
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 120  
 gcagcccagg tgaccttcag aaagacattg gagaaggaag caaagggaga ggagcccagc  
 180  
 atcgagtc ccaagttcaa acagaggaag ggggagtccg acggggccta tatccaccgc  
 240

atgcagcaag aggccagca tgtgtgttc ctcagcaaga accaggccat ccggcagcca  
 300  
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 344

<210> 3124

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3124

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Lys	Lys	Ala	Ala	Gln	Val	Thr	Phe	Arg	Lys	Thr	Leu	Glu	Lys	Glu	Ala
		20						25				30			
Lys	Gly	Glu	Glu	Pro	Asp	Ile	Ala	Val	Pro	Lys	Phe	Lys	Gln	Arg	Lys
		35					40					45			
Gly	Glu	Ser	Asp	Gly	Ala	Tyr	Ile	His	Arg	Met	Gln	Gln	Glu	Ala	Gln
	50					55					60				
His	Val	Leu	Phe	Leu	Ser	Lys	Asn	Gln	Ala	Ile	Arg	Gln	Pro	Glu	Val
65				70						75				80	
Gln	Ala	Ala	Pro	Lys	Glu	Lys	Ser	Glu	Gln	Lys	Lys				
				85						90					

<210> 3125

<211> 647

<212> DNA

<213> Homo sapiens

<400> 3125

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 120  
 ggtcagcagg cagtttagtt gtgggagtat ttccaatttg catgaatgaa acatggacaa  
 180  
 ataagataag gctggctcca gggaagtaat tccccagtt ccctgagcc ttggatctgg  
 240  
 aaaactgcag cccatcctgg aattagggaa catcacaaaa cgtactgggg agaactcccc  
 300  
 atgtggcctc ggcccacgcc agaagccggg caaggtccca agtgccggct cgcccacaag  
 360  
 ctatggctaa gacagaaaaa caaaggaaaa aaagtccctc ccaaacacac acataagcaa  
 420  
 aacccatctt cctgtgttct ctgccaaagag agctggagca aaagagatga gtttgagact  
 480  
 ctgattcatc catcaagaca aataaactca gtctatggag gttagcaggg caatttgtga  
 540  
 agcaaacaaa agttgagttt tggaaagggg ctctgaagaa aatgaagatg acataaccagg  
 600  
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 647

<210> 3126

<211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 3126  
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 Phe Gln Asn Ser Thr Phe Val Cys Phe Thr Asn Cys Pro Ala Asn Leu  
 20 25 30  
 His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr  
 35 40 45  
 His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly  
 50 55 60  
 Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser  
 65 70 75 80  
 Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg  
 85 90 95  
 Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe  
 100 105 110  
 Cys Asp Val Pro  
 115

<210> 3127  
 <211> 2218  
 <212> DNA  
 <213> Homo sapiens

<400> 3127  
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 120  
 acttttgaga aattgaagag cctagggctt tttgggctgc aagtcaccaga agaatatggt  
 180  
 ggcttgggct tctccaacac catgtactca agactagggg agatcatcag catggatggg  
 240  
 tccatcactg tgaccctggc agcgcaccag gctattggcc tcaaggggat catcttggct  
 300  
 ggcaactgagg agcagaaagc caaatacttg cctaaactgg cgtccgggga gcacatagca  
 360  
 gccttctgcc tcacggagcc agccagtggg agcgatgcag cctcaatccg gagcagagcc  
 420  
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2218

&lt;210&gt; 3128

&lt;211&gt; 565

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu  
 35 40 45  
 Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Leu Gly Phe  
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 Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly  
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 Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu  
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 Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn  
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 Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val  
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 Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu  
 180 185 190  
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 Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala  
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 Met Asn Ile Leu Asn Ser Gly Arg Phe Ser Met Gly Ser Val Val Ala  
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 Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr  
 260 265 270  
 Arg Lys Gln Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu  
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 Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr  
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 Tyr Leu Thr Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser  
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 325 330 335  
 Cys Val Ser Glu Ala Leu Gln Ile Leu Gly Gly Leu Gly Tyr Thr Arg  
 340 345 350  
 Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile  
 355 360 365  
 Phe Glu Gly Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly  
 370 375 380  
 Leu Gln His Ala Gly Arg Ile Leu Thr Thr Arg Ile His Glu Leu Lys  
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<212> DNA
<213> Homo sapiens
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840

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 1964

&lt;210&gt; 3130

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3130

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Gly	Pro	Gly	Ala	Ala	Gln	Glu	Pro	Thr	Trp	Leu	Thr	Asp	Val	Pro	Ala
			35					40				45			
Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
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Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	His	Ser	Met	Val	Gln

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Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	Thr	Asp	Ser	Glu	Val	Leu
				85					90					95	
Thr	His	Tyr	Asn	Ile	Thr	Gly	Asn	Thr	Ile	Cys	Leu	Phe	Arg	Leu	Val
			100					105					110		
Asp	Asn	Glu	Gln	Leu	Asn	Leu	Glu	Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp
		115					120					125			
Ala	Thr	Lys	Leu	Ser	Arg	Phe	Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val
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Thr	Glu	Tyr	Asn	Pro	Val	Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile
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Gln	Ile	His	Leu	Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu	
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	210					215					220				
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Ser	Val	Glu	His	Val	Gln	Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	Lys
			245					250					255		
Leu	Leu	Lys	Glu	Asn	Arg	Glu	Ser	Lys	Arg	Lys	Thr	Pro	Lys	Val	Glu
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Leu															

&lt;210&gt; 3131

&lt;211&gt; 1544

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3131

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240

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300

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420

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600



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&lt;210&gt; 3132

&lt;211&gt; 283

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3132

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Gly	Ser	Thr	Gly	Thr	Ala	Glu	Gly	Gly	Asn	Met	Ser	Arg	Leu	Ser	Leu
			20					25					30		
Thr	Arg	Ser	Pro	Val	Ser	Pro	Leu	Ala	Ala	Gln	Gly	Ile	Pro	Leu	Pro
		35					40					45			
Ala	Gln	Leu	Thr	Lys	Ser	Asn	Ala	Pro	Val	His	Ile	Asp	Val	Gly	Gly
		50				55					60				
His	Met	Tyr	Thr	Ser	Ser	Leu	Ala	Thr	Leu	Thr	Lys	Tyr	Pro	Glu	Ser
65					70					75				80	
Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
			85					90					95		
Leu	Lys	Gln	His	Tyr	Phe	Ile	Asp	Arg	Asp	Gly	Gln	Met	Phe	Arg	Tyr
			100					105					110		
Ile	Leu	Asn	Phe	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Asp	Asp	Phe

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 130 135 140  
 Pro Met Leu Leu Glu Met Glu Arg Trp Lys Gln Asp Arg Glu Thr Gly  
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 Arg Phe Ser Arg Pro Cys Glu Cys Leu Val Val Arg Val Ala Pro Asp  
 165 170 175  
 Leu Gly Glu Arg Ile Thr Leu Ser Gly Asp Lys Ser Leu Ile Glu Glu  
 180 185 190  
 Val Phe Pro Glu Ile Gly Asp Val Met Cys Asn Ser Val Asn Ala Gly  
 195 200 205  
 Trp Asn His Asp Ser Thr His Val Ile Arg Phe Pro Leu Asn Gly Tyr  
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 Cys His Leu Asn Ser Val Gln Val Leu Glu Arg Leu Gln Gln Arg Gly  
 225 230 235 240  
 Phe Glu Ile Val Gly Ser Cys Gly Gly Gly Val Asp Ser Ser Gln Phe  
 245 250 255  
 Ser Glu Tyr Val Leu Arg Arg Glu Leu Arg Arg Thr Pro Arg Val Pro  
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&lt;210&gt; 3133

&lt;211&gt; 621

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3133

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&lt;210&gt; 3134

&lt;211&gt; 51

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3134

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 Asp Phe Met  
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<211> 3166

<212> DNA

<213> Homo sapiens

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<211> 278

<212> PRT

<213> Homo sapiens

<400> 3136

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&lt;211&gt; 5773

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3137

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<212> PRT

<213> Homo sapiens

<400> 3138

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Glu Leu Ile Lys Ile Phe Leu Leu Glu Cys Asn Val Arg Glu Val Arg				
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Ala Leu Leu Asp Lys Asp Val Pro Glu Asn Cys Lys Asn Cys Ala Gln				
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Tyr Phe Phe Leu Phe Asn Thr Phe Val Gln Lys Gln Gly Ile Arg Ala				
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Gly Asp Leu Leu Leu Arg His Ser Ala Leu Arg His Met Ile Ser Phe				
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Val Leu His Ser Asp Val Ser Ser Gln Arg Asn Val Ala Pro Gly Ile				
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Phe Lys Gln Arg Pro Pro Ile Ser Ile Ala Pro Ser Ser Pro Leu Leu				
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Pro Leu His Glu Glu Val Glu Ala Leu Leu Phe Met Ser Glu Gly Lys				
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Ala Pro Pro His Glu Leu Lys Asn Thr Phe Gln Leu Leu His Glu Ile				
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Leu Val Ile Glu Asp Pro Ile Gln Ala Glu Arg Val Lys Phe Val Phe				
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Glu Thr Glu Asn Gly Leu Leu Ala Leu Met His His Ser Asn His Val				
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Asp Ser Ser Arg Cys Tyr Gln Cys Val Lys Phe Leu Val Thr Leu Ala				
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Leu Asn Lys Ser Ser Asn Trp Gly Thr Ser Pro Leu Leu Trp Tyr Phe
      35             40             45
Tyr Ser Ala Leu Pro Arg Gly Leu Gly Cys Ser Leu Leu Phe Ile Pro
      50             55             60
Leu Gly Leu Val Asp Arg Arg Thr His Ala Pro Thr Val Leu Ala Leu

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&lt;210&gt; 3141

&lt;211&gt; 1815

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3141

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&lt;210&gt; 3142

&lt;211&gt; 451

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3142

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			20					25					30		
Pro	Glu	Gly	Ile	Val	Glu	Glu	Phe	Ala	Thr	Glu	Gly	Thr	Asp	Arg	Lys
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Asp	Val	Phe	Phe	Tyr	Gln	Ala	Asp	Asp	Glu	His	Tyr	Ile	Pro	Arg	Ala
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Val	Leu	Leu	Asp	Leu	Glu	Pro	Arg	Val	Ile	His	Ser	Ile	Leu	Asn	Ser
65					70				75					80	
Pro	Tyr	Ala	Lys	Leu	Tyr	Asn	Pro	Glu	Asn	Ile	Tyr	Leu	Ser	Glu	His
			85					90						95	
Gly	Gly	Gly	Ala	Gly	Asn	Asn	Trp	Ala	Ser	Gly	Phe	Ser	Gln	Gly	Glu
			100					105					110		
Lys	Ile	His	Glu	Asp	Ile	Phe	Asp	Ile	Ile	Asp	Arg	Glu	Ala	Asp	Gly
		115					120					125			
Ser	Asp	Ser	Leu	Glu	Gly	Phe	Val	Leu	Cys	His	Ser	Ile	Ala	Gly	Gly
	130					135					140				
Thr	Gly	Ser	Gly	Leu	Gly	Ser	Tyr	Leu	Leu	Glu	Arg	Leu	Asn	Asp	Arg
145				150					155					160	
Tyr	Pro	Lys	Lys	Leu	Val	Gln	Thr	Tyr	Ser	Val	Phe	Pro	Asn	Gln	Asp
			165					170						175	
Glu	Met	Ser	Asp	Val	Val	Val	Gln	Pro	Tyr	Asn	Ser	Leu	Leu	Thr	Leu
			180					185				190			
Lys	Arg	Leu	Thr	Gln	Asn	Ala	Asp	Cys	Val	Val	Val	Leu	Asp	Asn	Thr

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Ala Leu Asn Arg Ile	Ala Thr Asp Arg Leu His Ile	Gln Asn Pro Ser
210	215	220
Phe Ser Gln Ile Asn	Gln Leu Val Ser Thr Ile	Met Ser Ala Ser Thr
225	230	235
Thr Thr Leu Arg Tyr	Pro Gly Tyr Met Asn	Asn Asp Leu Ile Gly Leu
245	250	255
Ile Ala Ser Leu Ile	Pro Thr Pro Arg Leu	His Phe Leu Met Thr Gly
260	265	270
Tyr Thr Pro Leu Thr	Thr Thr Asp Gln Ser	Val Ala Ser Val Arg Lys Thr
275	280	285
Thr Val Leu Asp Val	Met Arg Arg Leu Leu	Gln Pro Lys Asn Val Met
290	295	300
Val Ser Thr Gly Arg	Asp Arg Gln Thr Asn	His Cys Tyr Ile Ala Ile
305	310	315
Leu Asn Ile Ile Gln	Gly Glu Val Asp Pro	Thr Gln Val His Lys Ser
325	330	335
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340	345	350
Pro Ala Ser Ile Gln	Val Ala Leu Ser Arg	Lys Ser Pro Tyr Leu Pro
355	360	365
Ser Ala His Arg Val	Ser Gly Leu Met Met	Ala Asn His Thr Ser Ile
370	375	380
Ser Ser Leu Phe Glu	Arg Thr Cys Arg Gln	Tyr Asp Lys Leu Arg Lys
385	390	395
Arg Glu Ala Phe Leu	Glu Gln Phe Arg Lys	Glu Asp Met Phe Lys Asp
405	410	415
Asn Phe Asp Glu Met	Asp Thr Ser Arg Glu	Ile Val Gln Gln Leu Ile
420	425	430
Asp Glu Tyr His Ala	Ala Thr Arg Pro Asp	Tyr Ile Ser Trp Gly Thr
435	440	445
Gln Glu Gln		
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&lt;210&gt; 3143

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3143

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356

&lt;210&gt; 3144

<211> 81  
 <212> PRT  
 <213> Homo sapiens

<400> 3144  
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 35 40 45  
 Leu Pro Thr Ser Gln Glu Leu Arg Pro Ala Ala Gln Pro Lys Gln Gln  
 50 55 60  
 Pro His His Ser Gln Thr Pro Pro Gln Arg Val Cys Leu Arg Ala Pro  
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<210> 3145  
 <211> 436  
 <212> DNA  
 <213> Homo sapiens

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<210> 3146  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 3146  
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 35 40 45  
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser



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Leu Val Cys Gln Thr	Leu Gln Pro Pro Ala Ser	Gly His Ser Ala Arg		
65	70	75	80	
Gln Met Thr Ser Gly	Gly Glu Pro His Ile Ser	Thr Gly Ser Arg Arg		
	85	90	95	
Pro Arg Lys Leu Pro	Trp Pro Ala His Pro Arg	Cys Ser Ala Cys Pro		
	100	105	110	
Pro Asn Val Val Ser	Ser Arg Arg Arg Leu Thr	Pro Arg Arg Gly Trp		
	115	120	125	
Gly Thr Ser				
130				

&lt;210&gt; 3147

&lt;211&gt; 3106

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3147

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<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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Thr	Asp	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Thr	Lys	35	40	45	
Trp	Ser	Ile	Gln	His	Pro	Gly	Gly	Gln	Arg	Val	Ile	Gly	His	Tyr	Ala	50	55	60	
Gly	Glu	Asp	Ala	Thr	Asp	Ala	Phe	Arg	Ala	Phe	His	Pro	Asp	Leu	Glu	65	70	75	80
Phe	Val	Gly	Lys	Phe	Leu	Lys	Pro	Leu	Leu	Ile	Gly	Glu	Leu	Ala	Pro	85	90	95	
Glu	Glu	Pro	Ser	Gln	Asp	His	Gly	Lys	Asn	Ser	Lys	Ile	Thr	Glu	Asp	100	105	110	
Phe	Arg	Ala	Leu	Arg	Lys	Thr	Ala	Glu	Asp	Met	Asn	Leu	Phe	Lys	Thr	115	120	125	
Asn	His	Val	Phe	Phe	Leu	Leu	Leu	Leu	Ala	His	Ile	Ile	Ala	Leu	Glu	130	135	140	
Ser	Ile	Ala	Trp	Phe	Thr	Val	Phe	Tyr	Phe	Gly	Asn	Gly	Trp	Ile	Pro	145	150	155	160
Thr	Leu	Ile	Thr	Ala	Phe	Val	Leu	Ala	Thr	Ser	Gln	Ala	Gln	Ala	Gly	165	170	175	
Trp	Leu	Gln	His	Asp	Tyr	Gly	His	Leu	Ser	Val	Tyr	Arg	Lys	Pro	Lys	180	185	190	
Trp	Asn	His	Leu	Val	His	Lys	Phe	Val	Ile	Gly	His	Leu	Lys	Gly	Ala	195	200	205	
Ser	Ala	Asn	Trp	Trp	Asn	His	Arg	His	Phe	Gln	His	His	Ala	Lys	Pro	210	215	220	
Asn	Ile	Phe	His	Lys	Asp	Pro	Asp	Val	Asn	Met	Leu	His	Val	Phe	Val	225	230	235	240
Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu	Lys	Tyr	245	250	255	
Leu	Pro	Tyr	Asn	His	Gln	His	Glu	Tyr	Phe	Phe	Leu	Ile	Gly	Pro	Pro				

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Leu	Leu Ile Pro Met Tyr Phe Gln Tyr Gln Ile Ile Met Thr Met Ile				
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Val	His Lys Asn Trp Val Asp Leu Ala Trp Ala Val Ser Tyr Tyr Ile				
	290		295		300
Arg	Phe Phe Ile Thr Tyr Ile Pro Phe Tyr Gly Ile Leu Gly Ala Leu				
	305		310		315
Leu	Phe Leu Asn Phe Ile Arg Phe Leu Glu Ser His Trp Phe Val Trp				
		325		330	
Val	Thr Gln Met Asn His Ile Val Met Glu Ile Asp Gln Glu Ala Tyr				
		340		345	
Arg	Asp Trp Phe Ser Ser Gln Leu Thr Ala Thr Cys Asn Val Glu Gln				
		355		360	
Ser	Phe Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu				
		370		375	
His	His Leu Phe Pro Thr Met Pro Arg His Asn Leu His Lys Ile Ala				
		385		390	
Pro	Leu Val Lys Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Glu				
		405		410	
Lys	Pro Leu Leu Arg Ala Leu Leu Asp Ile Ile Arg Ser Leu Lys Lys				
		420		425	
Ser	Gly Lys Leu Trp Leu Asp Ala Tyr Leu His Lys				
		435		440	

&lt;210&gt; 3149

&lt;211&gt; 1006

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3149

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<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
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<210> 3151

<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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&lt;210&gt; 3152

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3152

Met	Asp	Asp	Ser	Glu	Thr	Gly	Phe	Asn	Leu	Lys	Val	Val	Leu	Val	Ser
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			20					25					30		
Ile	Ala	Ser	Trp	Lys	Gly	Leu	Val	Arg	Phe	Leu	Asn	Ser	Leu	Gly	Thr
		35				40						45			
Ile	Phe	Ser	Phe	Ile	Ser	Lys	Asp	Val	Val	Ser	Lys	Leu	Arg	Ile	Met
	50					55					60				
Glu	Arg	Leu	Arg	Gly	Gly	Pro	Gln	Ser	Glu	His	Tyr	Arg	Ser	Leu	Gln
65					70					75				80	
Ala	Met	Val	Ala	His	Glu	Leu	Ser	Asn	Arg	Leu	Val	Asp	Leu	Glu	Gly
				85					90					95	
Arg	Ser	His	His	Pro	Glu	Ser	Gly	Cys	Arg	Thr	Val	Leu	Arg	Leu	His
			100					105					110		
Arg	Ala	Leu	His	Trp	Leu	Gln	Leu	Phe	Leu	Glu	Gly	Leu	Arg	Thr	Ser
		115				120						125			
Pro	Glu	Asp	Ala	Arg	Thr	Ser	Ala	Leu	Cys	Ala	Asp	Ser	Tyr	Asn	Ala
	130					135						140			
Ser	Leu	Ala	Ala	Tyr	His	Pro	Trp	Val	Val	Arg	Arg	Ala	Val	Thr	Val
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Ala	Phe	Cys	Thr	Leu	Pro	Thr	Arg	Glu	Val	Phe	Leu	Glu	Ala	Met	Asn
			165						170					175	
Val	Gly	Pro	Pro	Glu	Gln	Ala	Val	Gln	Met	Leu	Gly	Glu	Ala	Leu	Pro
		180				185						190			
Phe	Ile	Gln	Arg	Val	Tyr	Asn	Val	Ser	Gln	Lys	Leu	Tyr	Ala	Glu	His
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Ser	Leu	Leu	Asp	Leu	Pro										
	210														

&lt;210&gt; 3153

&lt;211&gt; 1498

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3153

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1498

&lt;210&gt; 3154

&lt;211&gt; 65

&lt;212&gt; PRT



<213> Homo sapiens

<400> 3154

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 20 25 30  
 Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His  
 35 40 45  
 Gly Leu Leu Gly Leu Gln Ala Pro Trp Gly Ser Arg Gly Lys Pro Gln  
 50 55 60  
 Gly  
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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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 240  
 gccagccctg gggaaattct ggaaattttg aagaaaggga aggcatttgt ttagatatt  
 300  
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 360  
 aaaatcttac aagagctgta ccaatttaag aaacctggca ccaacctaac agaggaagat  
 420  
 ttggtagata ttgttgatac tcgaattcat caattagagg atttagaagc cactttcgct  
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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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 20 25 30  
 Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp  
 35 40 45  
 Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

50		55		60
Cys Ser Ser Glu Asn Gln Glu Cys Gln Thr Ala Ala Ser Pro Gly Glu				
65		70		75
Ile Leu Glu Ile Leu Lys Lys Gly Lys Ala Phe Val Leu Asp Ile Asp				80
	85		90	
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				95
	100		105	
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				110
	115		120	
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				125
	130		135	
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				140
145		150		155
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				160
	165		170	
				175
Ser Leu				

&lt;210&gt; 3157

&lt;211&gt; 903

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3157

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720
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780
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900

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cac  
903

<210> 3158  
<211> 92  
<212> PRT  
<213> Homo sapiens

<400> 3158  
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Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Arg Thr  
35 40 45  
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val  
50 55 60  
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln  
65 70 75 80  
Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln  
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<210> 3159  
<211> 2408  
<212> DNA  
<213> Homo sapiens

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420  
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480  
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780

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2160  
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2400

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<210> 3160

<211> 431

<212> PRT

<213> Homo sapiens

<400> 3160

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			20					25					30		
Glu	Lys	Leu	Leu	Glu	Lys	Tyr	Met	Asp	Glu	Asp	Gly	Glu	Trp	Trp	Ile
		35					40					45			
Ala	Lys	Gln	Arg	Gly	Lys	Arg	Ala	Ile	Thr	Asp	Asn	Asp	Met	Gln	Ser
	50					55					60				
Ile	Leu	Asp	Leu	His	Asn	Lys	Leu	Arg	Ser	Gln	Val	Tyr	Pro	Thr	Ala
65					70					75					80
Ser	Asn	Met	Glu	Tyr	Met	Thr	Trp	Asp	Val	Glu	Leu	Glu	Arg	Ser	Ala
				85				90						95	
Glu	Ser	Trp	Ala	Glu	Ser	Cys	Leu	Trp	Glu	His	Gly	Pro	Ala	Ser	Leu
			100					105					110		
Leu	Pro	Ser	Ile	Gly	Gln	Asn	Leu	Gly	Ala	His	Trp	Gly	Arg	Tyr	Arg
	115						120					125			
Pro	Pro	Thr	Phe	His	Val	Gln	Ser	Trp	Tyr	Asp	Glu	Val	Lys	Asp	Phe
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Ser	Tyr	Pro	Tyr	Glu	His	Glu	Cys	Asn	Pro	Tyr	Cys	Pro	Phe	Arg	Cys
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Ser	Gly	Pro	Val	Cys	Thr	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	Thr	Ser
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Asn	Arg	Ile	Gly	Cys	Ala	Ile	Asn	Leu	Cys	His	Asn	Met	Asn	Ile	Trp
			180					185					190		
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Ser	Ala	Cys	Pro	Pro	Ser	Phe	Gly	Gly	Gly	Cys	Arg	Glu	Asn	Leu	Cys
225					230					235					240
Tyr	Lys	Glu	Gly	Ser	Asp	Arg	Tyr	Tyr	Pro	Pro	Arg	Glu	Glu	Glu	Thr
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Thr	Arg	Ser	Asp	Asp	Ser	Ser	Arg	Asn	Glu	Val	Ile	Ser	Ala	Gln	Gln
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Met	Ser	Gln	Ile	Val	Ser	Cys	Glu	Val	Arg	Leu	Arg	Asp	Gln	Cys	Lys
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Lys	Ala	Lys	Val	Ile	Gly	Ser	Val	His	Tyr	Glu	Met	Gln	Ser	Ser	Ile
			325					330						335	
Cys	Arg	Ala	Ala	Ile	His	Tyr	Gly	Ile	Ile	Asp	Asn	Asp	Gly	Gly	Trp
		340						345					350		
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Arg Asn Gly Ile Gln Thr	Ile Gly Lys Tyr Gln	Ser Ala Asn Ser Phe
370	375	380
Thr Val Ser Lys Val Thr	Val Gln Ala Val Thr	Cys Glu Thr Thr Val
385	390	395
Asp Ser Ser Val His Phe	Ile Ser Leu Leu His	Ile Ala Gln Glu Tyr
405	410	415
Thr Val Leu Val Thr Val	Cys Lys Gln Ile His	Ile Met Leu Val
420	425	430

&lt;210&gt; 3161

&lt;211&gt; 1197

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3161

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<210> 3162

<211> 386

<212> PRT

<213> Homo sapiens

<400> 3162

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			20					25					30		
Ile	Thr	Ala	Ser	Ser	Asn	Lys	Ser	Leu	Asn	Leu	Leu	Lys	Ile	Lys	His
		35					40					45			
Gly	Asp	Leu	Leu	Phe	Leu	Phe	Pro	Ser	Ser	Leu	Ala	Gly	Pro	Ser	Ser
	50					55					60				
Glu	Met	Glu	Thr	Ser	Val	Pro	Pro	Gly	Phe	Lys	Val	Phe	Gly	Ala	Pro
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Asn	Val	Val	Glu	Asp	Glu	Ile	Asp	Gln	Tyr	Leu	Ser	Lys	Gln	Asp	Gly
				85					90					95	
Lys	Ile	Tyr	Arg	Ser	Arg	Asp	Pro	Gln	Leu	Cys	Arg	His	Gly	Pro	Leu
			100					105					110		
Gly	Lys	Cys	Val	His	Cys	Val	Pro	Leu	Glu	Pro	Phe	Asp	Glu	Asp	Tyr
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Leu	Asn	His	Leu	Glu	Pro	Pro	Val	Lys	His	Met	Ser	Phe	His	Ala	Tyr
	130						135				140				
Ile	Arg	Lys	Leu	Thr	Gly	Gly	Ala	Asp	Lys	Gly	Lys	Phe	Val	Ala	Leu
145					150					155					160
Glu	Asn	Ile	Ser	Cys	Lys	Ile	Lys	Ser	Gly	Cys	Glu	Gly	His	Leu	Pro
				165					170					175	
Trp	Pro	Asn	Gly	Ile	Cys	Thr	Lys	Cys	Gln	Pro	Ser	Ala	Ile	Thr	Leu
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Val	Asp	Glu	Ile	Ala	Ala	Lys	Leu	Gly	Leu	Arg	Lys	Val	Gly	Trp	Ile
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Phe	Thr	Asp	Leu	Val	Ser	Glu	Asp	Thr	Arg	Lys	Gly	Thr	Val	Arg	Tyr
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Ser	Arg	Asn	Lys	Asp	Thr	Tyr	Phe	Leu	Ser	Ser	Glu	Glu	Cys	Ile	Thr
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Ala	Gly	Asp	Phe	Gln	Asn	Lys	His	Pro	Asn	Met	Cys	Arg	Leu	Ser	Pro
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Asp	Gly	His	Phe	Gly	Ser	Lys	Phe	Val	Thr	Ala	Val	Ala	Thr	Gly	Gly
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<212> DNA
<213> Homo sapiens
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<213> Homo sapiens
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&lt;400&gt; 3164

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 Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser  
 35 40 45  
 Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly  
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 Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala  
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 Ser Val Gly Val Gly Ala Gly Ala Ile Arg Ser Arg Thr Val  
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&lt;210&gt; 3165

&lt;211&gt; 2413

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3165

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 180  
 tggctcagca gggccgagtg ggaccagggt acggtttatac tgttctgtga cgaccataag  
 240  
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&lt;210&gt; 3166

&lt;211&gt; 717

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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35 40 45  
Ala Glu Trp Asp Gln Val Thr Val Tyr Leu Phe Cys Asp Asp His Lys  
50 55 60  
Leu Gln Arg Tyr Ala Leu Asn Arg Ile Thr Val Trp Arg Ser Arg Ser  
65 70 75 80  
Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg  
85 90 95  
Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg  
100 105 110  
Leu Leu Tyr Gly Met Ala Leu Val Arg Phe Val Asn Leu Ile Ser Glu  
115 120 125  
Arg Lys Thr Lys Phe Ala Lys Val Pro Leu Lys Cys Leu Ala Gln Glu  
130 135 140  
Val Asn Ile Pro Asp Trp Ile Val Asp Leu Arg His Glu Leu Thr His  
145 150 155 160  
Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val  
165 170 175  
Leu Asp Trp Leu Gln Lys Thr Tyr Trp Cys Arg Gln Leu Glu Asn Ser  
180 185 190  
Leu Arg Glu Thr Trp Glu Leu Glu Glu Phe Arg Glu Gly Ile Glu Glu  
195 200 205  
Glu Asp Gln Glu Glu Asp Lys Asn Ile Val Val Asp Asp Ile Thr Glu  
210 215 220  
Gln Lys Pro Glu Pro Gln Asp Asp Gly Lys Ser Thr Glu Ser Asp Val  
225 230 235 240  
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Lys Lys Ala Leu Ser His Lys Glu Leu Tyr Glu Arg Ala Arg Glu Leu  
260 265 270  
Leu Val Ser Tyr Glu Glu Glu Gln Phe Thr Val Leu Glu Lys Phe Arg  
275 280 285  
Tyr Leu Pro Lys Ala Ile Lys Ala Trp Asn Asn Pro Ser Pro Arg Val  
290 295 300  
Glu Cys Val Leu Ala Glu Leu Lys Gly Val Thr Cys Glu Asn Arg Glu  
305 310 315 320  
Ala Val Leu Asp Ala Phe Leu Asp Asp Gly Phe Leu Val Pro Thr Phe  
325 330 335  
Glu Gln Leu Ala Ala Leu Gln Ile Glu Tyr Glu Glu Asn Val Asp Leu  
340 345 350  
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Gly Arg Asn Ala Arg Arg Phe Ser Ala Gly Gln Trp Glu Ala Arg Arg

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Gly Trp Arg Leu Phe Asn Cys Ser Ala Ser Leu Asp Trp Pro Arg Met					
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Val Glu Ser Cys Leu Gly Ser Pro Cys Trp Ala Ser Pro Gln Leu Leu					
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Arg Ile Ile Phe Lys Ala Met Gly Gln Gly Leu Pro Asp Glu Glu Gln					
465		470		475	480
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Tyr Thr Leu Asp Ser Leu Tyr Trp Ser Val Lys Pro Ala Ser Ser Ser					
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Phe Gly Ser Glu Ala Lys Ala Gln Gln Gln Glu Glu Gln Gly Ser Val					
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Gln Val Glu Glu Glu Glu Glu Asn Asp Asp Gln Glu Glu Glu Glu					
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Leu Ala Gln Lys Arg Gly Ala Leu Gln Gly Ser Ala Trp Gln Val Ser					
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Ser Glu Asp Val Arg Trp Asp Thr Phe Pro Leu Gly Arg Met Pro Gly					
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Gln Thr Glu Asp Pro Ala Glu Leu Met Leu Glu Asn Tyr Asp Thr Met					
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Tyr Leu Leu Asp Gln Pro Val Leu Glu Gln Arg Leu Glu Pro Ser Thr					
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Cys Lys Thr Asp Thr Leu Gly Leu Ser Cys Gly Val Gly Ser Gly Asn					
	675		680		685
Cys Ser Asn Ser Ser Ser Ser Asn Phe Glu Gly Leu Leu Trp Ser Gln					
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Gly Gln Leu His Gly Leu Lys Thr Gly Leu Gln Leu Phe					
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&lt;210&gt; 3167

&lt;211&gt; 2730

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3167

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120

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300

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<210> 3168

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3168

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Ala	Leu	Arg	Val	Trp	Gly	Val	Gly	Asn	Glu	Ala	Gly	Val	Gly	Pro	Gly
		35						40					45		
Leu	Gly	Glu	Trp	Ala	Val	Val	Thr	Gly	Ser	Thr	Asp	Gly	Ile	Gly	Lys
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Ser	Tyr	Ala	Glu	Glu	Leu	Ala	Lys	His	Gly	Met	Lys	Val	Val	Leu	Ile
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Ser	Arg	Ser	Lys	Asp	Lys	Leu	Asp	Gln	Val	Ser	Ser	Glu	Ile	Lys	Glu
			85					90						95	
Lys	Phe	Lys	Val	Glu	Thr	Arg	Thr	Ile	Ala	Val	Asp	Phe	Ala	Ser	Glu
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Asp	Ile	Tyr	Asp	Lys	Ile	Lys	Thr	Gly	Leu	Ala	Gly	Leu	Glu	Ile	Gly
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Leu	Asp	Val	Pro	Asp	Leu	Asp	Asn	Val	Ile	Lys	Lys	Met	Ile	Asn	Ile

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Val	Glu	Arg	Ser	Lys	Gly	Ala	Ile	Leu	Asn	Ile	Ser	Ser	Gly	Ser	Gly
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&lt;210&gt; 3169

&lt;211&gt; 5945

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3169

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<211> 412

<212> PRT

<213> Homo sapiens

<400> 3170

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			20					25						30	
Ala	Tyr	Gln	Gly	Ile	Thr	Gln	Glu	Lys	Ile	Asn	Glu	Met	Arg	Val	Ala
			35					40						45	
Pro	Glu	Gln	Gln	Met	Ile	Ala	Asp	Ile	His	Cys	Met	Ile	Ala	Ala	Gly
			50					55						60	
Gln	Asp	Leu	Asp	Trp	Ile	Asp	Ala	Gln	Gly	Ala	Thr	Leu	Leu	His	Ile
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Gly	Val	Arg	Val	Asp	Val	Lys	Asp	Trp	Asp	Gly	Trp	Glu	Pro	Leu	His
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Ala	Ala	Ala	Phe	Trp	Gly	Gln	Met	Gln	Met	Ala	Glu	Leu	Leu	Val	Ser
			115					120						125	
His	Gly	Ala	Ser	Leu	Ser	Ala	Arg	Thr	Ser	Met	Asp	Glu	Met	Pro	Ile
			130					135						140	
Asp	Leu	Cys	Glu	Glu	Glu	Phe	Lys	Val	Leu	Leu	Leu	Glu	Leu	Lys	
145					150				155					160	
His	Lys	His	Asp	Val	Ile	Met	Lys	Ser	Gln	Leu	Arg	His	Lys	Ser	Ser
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Leu	Ser	Arg	Arg	Thr	Ser	Ser	Ala	Gly	Ser	Arg	Gly	Lys	Val	Val	Arg
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Arg	Ala	Ser	Leu	Ser	Asp	Arg	Thr	Asn	Leu	Tyr	Arg	Lys	Glu	Tyr	Glu
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Gly	Glu	Ala	Ile	Leu	Trp	Gln	Arg	Ser	Ala	Ala	Glu	Asp	Gln	Arg	Thr
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Pro	Thr	Lys	Ile	Pro	Arg	Gly	Glu	Leu	Asp	Met	Pro	Val	Glu	Asn	Gly
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Val Trp Lys Val His Glu Val Pro Asp Tyr Ser Met Ala Tyr Gly Asn		
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Pro Gly Val Ala Asp Ala Thr Pro Pro Trp Ser Ser Tyr Lys Glu Gln		
305	310	315
Ser Pro Gln Thr Leu Glu Leu Lys Arg Gln Arg Ala Ala Ala Lys		
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Leu Leu Ser His Pro Phe Leu Ser Thr His Leu Gly Ser Ser Met Ala		
340	345	350
Arg Thr Gly Glu Ser Ser Ser Glu Gly Lys Ala Xaa Leu Ile Gly Gly		
355	360	365
Arg Thr Ser Pro Tyr Ser Ser Asn Gly Thr Ser Val Tyr Tyr Thr Val		
370	375	380
Thr Ser Gly Asp Pro Pro Leu Leu Lys Phe Lys Ala Pro Ile Glu Glu		
385	390	395
Met Glu Glu Lys Val His Gly Cys Cys Arg Ile Ser		400
405	410	

&lt;210&gt; 3171

&lt;211&gt; 753

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3171

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&lt;210&gt; 3172

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3172

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Leu Phe Pro Phe Thr Gly Ser Thr Asp Cys Val Cys Tyr Ser Thr Val
      20           25           30
Gly Thr Ser Asp Ala Glu Thr Ser Ala Leu His Ile Val Val Gly Asp
      35           40           45
Ser Leu Ala Met Asp Val Ser Ser Val His His Asn Ser Thr Leu Leu
 50           55           60
Arg Tyr Ser Val Ser Leu Leu Gly Tyr Gly Phe Tyr Gly Asp Ile Ile
65           70           75           80
Lys Asp Ser Glu Lys Lys Arg Trp Leu Gly Leu Ala Arg Tyr Asp Phe
      85           90           95
Ser Gly Leu Lys Thr Phe Leu Ser His His Cys Tyr Glu Gly Thr Val
      100          105          110
Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
      115          120          125
Pro Cys Arg Ala Gly Cys Phe Val Cys Arg Gln Ser Lys Gln Gln Leu
      130          135          140
Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
145          150          155          160
Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
      165          170          175
Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
      180          185          190
Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
      195          200          205
Cys Ser Arg Phe Asn Phe Leu Arg Phe Leu Ile Trp His Glu Val Cys
      210          215          220
Lys Lys Pro Leu
225

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&lt;210&gt; 3173

&lt;211&gt; 573

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3173

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420

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<210> 3174

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3174

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Gln	Thr	Phe	Pro	Leu	Gln	Leu	Glu	Asn	Gly	Gln	Thr	Val	Glu	Arg	Thr
	35					40					45				
Val	Ala	Gln	Tyr	Phe	Arg	Glu	Lys	Tyr	Thr	Leu	Gln	Leu	Lys	Tyr	Pro
50					55					60					
His	Leu	Pro	Cys	Leu	Gln	Val	Gly	Gln	Glu	Gln	Lys	His	Thr	Tyr	Leu
65				70					75					80	
Pro	Leu	Glu	Val	Cys	Asn	Ile	Val	Ala	Gly	Gln	Arg	Cys	Ile	Lys	Lys
			85					90					95		
Leu	Thr	Asp	Asn	Gln	Thr	Ser	Thr	Met	Ile	Lys	Ala	Thr	Ala	Arg	Ser
		100					105					110			
Ala	Pro	Asp	Arg	Gln	Glu	Glu	Ile	Ser	Arg	Leu	Val	Arg	Ser	Ala	Asn
		115					120					125			
Tyr	Glu	Thr	Asp	Pro	Phe	Val	Gln	Glu	Phe	Gln	Phe	Lys	Val	Arg	Asp
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<210> 3175

<211> 948

<212> DNA

<213> Homo sapiens

<400> 3175

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&lt;210&gt; 3176

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3176

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			20				25					30			
Pro	Asp	Ala	Trp	Gly	Leu	Pro	Thr	Pro	Gln	Gln	Ala	Arg	Gly	Lys	Ala
			35				40					45			
Arg	Gly	Asn	Glu	Tyr	Gln	Pro	Ser	Asn	Ile	Lys	Arg	Lys	Asn	Lys	His
			50				55					60			
Gly	Trp	Val	Arg	Arg	Leu	Ser	Thr	Pro	Ala	Gly	Val	Gln	Val	Ile	Leu
							70				75				80
Arg	Arg	Met	Leu	Lys	Gly	Arg	Lys	Ser	Leu	Ser	His				
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&lt;210&gt; 3177

&lt;211&gt; 1857

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3177

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1857

&lt;210&gt; 3178



<211> 273  
 <212> PRT  
 <213> Homo sapiens

<400> 3178

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Xaa Ile Gln Asp Ile Glu Gly Ala Ser Ala Lys Asp Leu Cys Ser Ala
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Ser Ser Val Val Ser Pro Ser Phe Val Pro Thr Gly Glu Lys Pro Cys
 20           25           30
Glu Gln Val Gln Phe Gln Pro Asn Thr Val Asn Thr Leu Ala Cys Pro
 35           40           45
Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro
 50           55           60
Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu
 65           70           75           80
Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu
 85           90           95
Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu
 100          105          110
Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile
 115          120          125
Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp
 130          135          140
Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
 145          150          155          160
Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His
 165          170          175
Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val
 180          185          190
His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu
 195          200          205
Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
 210          215          220
Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu
 225          230          235          240
Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val
 245          250          255
Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val
 260          265          270
Val
  
```

<210> 3179  
 <211> 3447  
 <212> DNA  
 <213> Homo sapiens

<400> 3179

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120
taaatcatga tacaaccacc acaggcaatt accatcaa atattcccat gatttacaaa
180
  
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tgtatcgctt atacagagga agttgcaaaa tccactgccag tacagacaca tccagtctaa  
240  
ttaactatcg tctattcata caacagcaac aactgcagct cctgagacca cagaaggaca  
300  
cagtgcagcag ctggtgactg agccagggtg gcctccgatc aataactgat cagagtaatg  
360  
agacttcgag aggaatgcct ataagaaatc tcaaaaggta tttgtttggg tgcagaaaca  
420  
aatgcaccct ccacatttgg attttctcta gaagaatctg tggccaaatc tcttatccaa  
480  
tggagggtact gagtggctgg atcagttacc atgcaagctc acgatgaatg agattgaatt  
540  
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660  
cagaacacag ctacagaatt aggatctcat ggtaacaatg aggaattagg ttactgtaga  
720  
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780  
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840  
atacagtcgc aattagaggc atagaagtca tactgaatgc tgaatagaag aacactgaga  
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1080  
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1200  
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1260  
cctaagtgtc caccattcc tcatgtgacc ctgacattcc ggggaactgg gaaacctgtt  
1320  
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1380  
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1440  
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1620  
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1680  
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1740  
gtttgcacac ctcttcggcc tatcccaagg accttcctag catataaaaa caggggctct  
1800

cctgatttgt aaacagaaca acaataaaaa ataaaaaaca aacaaaaaat tctccatgg  
1860  
cagcccaccc aatgaatacc ccagattttt agggccattg cgggtctgta gctgggtgta  
1920  
gagagagtta agctttcatc tcccatgttt acaacacttt gtgataaaat agttgagtgg  
1980  
agcaatcaca tccccactgc gtgcgctccc ccgggatgcc tcacagctgc tctgtgatca  
2040  
cacgtgcaaa tgttattatt attatttttt gcctttggca tcaaaggga agcctgttca  
2100  
ttaaaaaatc ttctatattc aacactccat agtgaaaaga atggatactt caaaattcct  
2160  
aaagcaatca tgtgaaaatt atttttattt ttaaaatttt tgaaagtgtt ttgattttta  
2220  
tgggtccttg ataattggcc agccctgttt tgcaaagaga tggactatct ctgagactag  
2280  
aatgttttct ttgaaaatat tgaagagtat aagagattta agacaataaa ggctgtaac  
2340  
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2400  
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2460  
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2520  
tttttttttc tgtaccttga agtaagcaga atagtccaag ctttcaaac tggatgatgt  
2580  
gtatgcgtga gggatgctta cataatagca acgctttatt gggcaaccg aatccataca  
2640  
tgtctggtgt ggtttgatag ctgggcttga aaaagtgtct ccagttgaaa ttagcattag  
2700  
aaatcggtta gaacaccaac atttcagggg gagggaggac tgctacaaag gaaaagaaca  
2760  
tgtctacaaa tgcactgaaa gaactagcca gaatatgaat tccattagta tctaagacac  
2820  
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2880  
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2940  
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3000  
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3180  
cttacagggt gtgtgagaac acccaataaa ctagggaact ttttgggaaa aacttcttcc  
3240  
tctccaaat tacacaacca ccaaacactc taaacatcac gtaaaatact gcatctgcaa  
3300  
tctgaatggc actcaggga cagcgctttg atgaaccagc agccacaggt tctccactga  
3360  
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3420

gttatacttt tttttccact tttgctt  
3447

<210> 3180  
<211> 127  
<212> PRT  
<213> Homo sapiens

<400> 3180  
Met Ser Phe Thr Asn Lys Ser Arg Gln Val Ser Gln Pro Glu Ile Ser  
1 5 10 15  
Thr Gln Thr Asp Gly Arg Asp Val Asn Ser Cys Leu Lys Leu Arg Cys  
20 25 30  
Ala Phe Thr Pro Thr Gly Lys Val Lys Leu Thr Phe Val Phe Leu Phe  
35 40 45  
Asn Asn Phe Met Ile Asn Lys Glu Leu Gln Leu Glu Thr Lys Ala Asn  
50 55 60  
Ser Arg Asn Ser Leu Thr Pro Ser Cys Pro Met Val Phe Met Ile Ala  
65 70 75 80  
Cys Tyr Gln Asn Glu Ala Leu Cys Ser Thr Leu Tyr Ser Lys Ala Phe  
85 90 95  
Tyr Ala Pro Thr Arg Pro Ser Gly Ile Pro Glu Ser Ala Leu His Thr  
100 105 110  
Gly Arg Lys Thr Ala Ser Ser Tyr Arg Leu Cys Glu Asn Thr Gln  
115 120 125

<210> 3181  
<211> 287  
<212> DNA  
<213> Homo sapiens

<400> 3181  
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60  
ggacgcgcgc cgcaacaagt gccgcattcg cctggggcggg cacatgaagc aggggggcct  
120  
cctcaaggac ggctgggctt ctccctgcac tcgcagctcg ccaagttcct gttggaccgg  
180  
tacacttctt caggctgtgt cctctgtgca ggctctgagc ttttgcttcc aaaaggtctg  
240  
cagtatctgg tgctcttgct tcatgccccca caccggagat gcaccct  
287

<210> 3182  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 3182  
Met Ala Ser Ser Pro Ala Val Asp Val Ser Cys Arg Arg Arg Gly Glu  
1 5 10 15  
Arg Arg Gln Leu Asp Ala Arg Arg Asn Lys Cys Arg Ile Arg Leu Gly  
20 25 30  
Gly His Met Lys Gln Gly Gly Leu Leu Lys Asp Gly Trp Ala Ser Pro

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<210> 3183
<211> 1457
<212> DNA
<213> Homo sapiens
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2399

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 1260  
 taggctactg ggtccagcta ctactttggt gggattcagg tgagtctcca tgcacttcac  
 1320  
 atgttaccca gtgttcttgt tacttccaag gagaaccaag aatggctctg tcacactcga  
 1380  
 agccagggtt gatcaataaa cacaatggta ttccaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1440  
 aaaaaaaaaa aaaaaaa  
 1457

<210> 3184  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 3184  
 Xaa Tyr Val Ser Cys Ile Val Met Thr Pro Ser Leu Cys Val Ala Cys  
 1 5 10 15  
 Pro Gln Leu Ile Thr His Ile Pro Arg Asn Ala Gly Tyr Ser Phe Val  
 20 25 30  
 Gln Thr Gln Leu Leu Val Pro Lys Lys Val Leu Pro Glu Ser Cys Arg  
 35 40 45  
 Leu Ser Trp Asn Leu Leu Gly Asp Glu Ala Ala Ala Glu Leu Ala Gln  
 50 55 60  
 Val Leu Pro Gln Met Gly Arg Leu Lys Arg Val Asp Leu Glu Lys Asn  
 65 70 75 80  
 Gln Ile Thr Ala Leu Gly Ala Trp Leu Leu Ala Glu Gly Leu Ala Gln  
 85 90 95  
 Gly Ser Ser Ile Gln Val Ile Arg Leu Trp Asn Asn Pro Ile Pro Cys  
 100 105 110  
 Asp Met Ala Gln His Leu Lys Ser Gln Glu Pro Arg Leu Asp Phe Ala  
 115 120 125  
 Phe Phe Asp Asn Gln Pro Gln Ala Pro Trp Gly Thr  
 130 135 140

<210> 3185  
 <211> 1433  
 <212> DNA  
 <213> Homo sapiens

<400> 3185  
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 ctctggctcc caccacacaa gcctcagagc aggaacaag cttggctgag atgcctcagg  
 120  
 cctggttaacc tgaggagggtg tagagcacc cagaaggaagg gtaaaagcag ggggcaaagc  
 180  
 ggtggccctc cttttctggg ggtcacttct gggtggggc cagctgaaac ctgtgtccaa  
 240  
 gtagctttca gggctggcca caccctaagc cttgcaaaag ggcctcctgc aagggtctggc  
 300  
 ccatggggtc ccacaccttc cagccagtga ggtagcatg gttaggagtc cacatgtgtg  
 360

caagtgcttg tgtggaggct catgtatgca tgtgtgtata tgcaaagctg cacatgacaa  
 420  
 tgtgcatgcc agtccagagt tagatgtacc tatgcagttg ccctcaagcg aagggtcata  
 480  
 tttggaaaca aggatggctc taaacatgta agcgtgcatg tgggcatgta tgtatctggg  
 540  
 gcctaaggag gtggggaagt ggggtgtggg gtaagggctg gccttcaggg catttgcaga  
 600  
 aggaggagtg ggtgggaggg aaaggctggg cagagcaggg gaaggagtga aagccaggca  
 660  
 ggaaagtgga agaacaggag aagctcatgt aatggattac cctccacagg attatgttcc  
 720  
 ttgattcctg agagtttttt ctcttgattt taccctctca gtctatcact gcaagagaaa  
 780  
 gaggtagaaa agacaaacag accacaaaag acaagaaccc agacatatag acagacgcac  
 840  
 ctgttgcatg tgcattgagc agagcctggg agagaagaga gagcgtgcaa gagagagctc  
 900  
 agagcaggca ggcagccac cccctgcagc agtgcctggg ttcactggag cccctgcagg  
 960  
 aagtccagca gccctgtatg ccactcctct ggtttgtcca ggtaacaggg gtgccccgcc  
 1020  
 cccttcatga tcagcaccog gtggttgggc agctgcttca ggtgctcaaa gctggtctga  
 1080  
 cccatggggt cctggtctcc atatacaatc agagctggag tctgagagga aggatagggg  
 1140  
 ggtggggcag agtcaacagg acctgccata gcacccacag ccctcccccac ttcagtctct  
 1200  
 tcctgggacc accccatag agggagagag acaagctggc ccagtgggtg ggggcacaga  
 1260  
 ttggtgtctg cccagaaca cagtttagca cagggttgg cacagtagtc tgctgagtaa  
 1320  
 accaaaaggg tggagtggg tggtcagctc ctcccagaag acacccttg attatccagc  
 1380  
 ccccatgga ggaaagccca ggtgcaccc ttccttgctc ctggcagggc acc  
 1433

<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

Met	Pro	Leu	Leu	Trp	Phe	Val	Gln	Val	Thr	Gly	Val	Pro	Arg	Pro	Leu
1				5					10					15	
His	Asp	Gln	His	Pro	Val	Val	Gly	Gln	Leu	Leu	Gln	Val	Leu	Lys	Ala
			20					25					30		
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
			35				40					45			
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
			50			55					60				
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
			65			70				75				80	
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

	85		90		95										
Val	Cys	Pro	Arg	Thr	Gln	Phe	Ser	Thr	Gly	Leu	Gly	Thr	Val	Val	Cys
	100							105					110		

&lt;210&gt; 3187

&lt;211&gt; 860

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3187

```

gggcccgag cagcctccct ttggtccgct tctcgaagg tcaattcaca gagcacttca
60
tatctaccag gagacggagt ttcgctatgt ttccagact ggttttgaac tcctggccta
120
aagtggctct ccgcctcgg cctcctgagt agctgggatt acagatatgt tcctaaaaca
180
tccctgagtt caccaccttg gccagaagtt gttctgccag acccagttga ggagaccaga
240
caccatgcag aggtcgtgaa gaaggatgaat gagatgatcg tcacggggca gtatggcagg
300
ctctttgccg tgggtgcactt tgccagccgc cagtggaagg tgacctctga agacctgatc
360
ttaattggaa atgaactaga ctttgcgtgt ggagagagaa ttcgactgga gaaggctctg
420
ctggttgggg cagacaactt cacgctgctt ggcaagccac tcctcgggta atggctgtga
480
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540
taggccagaa aggatcttgt tcgagtagaa gccacagtca ttgaaaagac agaatcatgg
600
ccaagaatca ttatgagatt caggaaaagg aaaaacttca agaagaaaag aagtaagtta
660
gagaaagtac cgctggggccc tgttgccagg tgctgggttc ccaggcgcat gcggacggag
720
ggtgtggggc acgtgggtct cgggacagga agcccaggca ggtctcaacc tggctgccac
780
tgccacttg ccacctcat cctagaggga gcaccagag ggtccagcct cgctccctt
840
ctctccacg ctccacgct
860

```

&lt;210&gt; 3188

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3188

Thr	Pro	Gly	Leu	Lys	Trp	Ser	Ser	Arg	Leu	Gly	Leu	Leu	Ser	Ser	Trp
1				5					10				15		
Asp	Tyr	Arg	Tyr	Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro
			20					25				30			
Glu	Val	Val	Leu	Pro	Asp	Pro	Val	Glu	Glu	Thr	Arg	His	His	Ala	Glu
		35					40				45				
Val	Val	Lys	Lys	Val	Asn	Glu	Met	Ile	Val	Thr	Gly	Gln	Tyr	Gly	Arg



```

      50              55              60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser
65              70              75              80
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu
      85              90              95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr
      100              105              110
Leu Leu Gly Lys Pro Leu Leu Gly
      115              120

```

&lt;210&gt; 3189

&lt;211&gt; 440

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3189

```

nngggccctt aagggcatgg atggggccgg actctggcct ggctgtcaac aagagggctg
60
agcctgggga agcaagtccc tgttttcagt accacctgca tccccaggg cagcatcctt
120
gactcccctt ctgggccagt gctgccctgc tttctctgtc tctttcaggg tgtgctgtcc
180
gacctcacca aagtgacctg gatgcatgga atcgacctg tgggtgctggt cctgatgggtg
240
ggcatgggtga tggtcacctt ggggttcgcc ggctgcgtgg gggctctgcg ggagaatatc
300
tgcttgctca actttgtgag tggccacaga gacaagagtg ggatatgatg caatggggta
360
caggctctgc tgggcaggat tatatgttac ctggtcagag cagggtggcag ctcttaggag
420
cctcccctat ggcccctgcc
440

```

&lt;210&gt; 3190

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3190

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Gly His Gly Trp Gly Arg Thr Leu Ala Trp Leu Ser Thr Arg Gly Leu
1              5              10              15
Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln
      20              25              30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu
      35              40              45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met
      50              55              60
His Gly Ile Asp Pro Val Val Leu Val Leu Met Val Gly Met Val Met
65              70              75              80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile
      85              90              95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile
      100              105              110

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<210> 3191  
 <211> 266  
 <212> DNA  
 <213> Homo sapiens

<400> 3191  
 cggaggccga cgggctgata gttccctgtt ccgtgtccgc tacttgagcc atggaccggg  
 60  
 accttttgcg gcagtcgcta aattgccacg ggctgtcttt gctctctcta cttcggagcg  
 120  
 aacagcagga caatccacac ttccgtagcc tctgtgggtc ggccgcccag ccagcccggg  
 180  
 gcccgccgcc ccagcaccgc ttgcagggca gaaaagagaa gagagttgac aacatcgaga  
 240  
 tacagaaatt catctcccaa aaagcg  
 266

<210> 3192  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 3192  
 Met Asn Phe Cys Ile Ser Met Leu Ser Thr Leu Phe Ser Phe Leu Pro  
 1 5 10 15  
 Cys Asn Gly Cys Trp Gly Gly Gly Pro Arg Ala Gly Ser Ala Ala Asp  
 20 25 30  
 Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser  
 35 40 45  
 Arg Glu Ser Lys Asp Asp Pro Trp Gln Phe Ser Asp Cys Arg Lys Arg  
 50 55 60  
 Ser Arg Ser Met Ala Gln Val Ala Asp Thr Glu Gln Gly Thr Ile Ser  
 65 70 75 80  
 Pro Ser Ala Ser

<210> 3193  
 <211> 567  
 <212> DNA  
 <213> Homo sapiens

<400> 3193  
 nctgaccaca tctccgaccg cgtaaggta ccgaagccat ggtgggaaga gctggactcc  
 60  
 acagcctgcc tgagtgttca gatccaggct ctgccagag ctggatgtaa atttatgacc  
 120  
 tggagtgagt tgttttgccc ctctgagcct cagtttctcc atctgtgaaa tggggacaac  
 180  
 agcagttcct tccaggaggg taaaaggagg agaaaaagaa tgcagatcca gcctcggca  
 240  
 gagtcagcgg ttcattgctt gcattgcaaag tgcccagccc ctggctcaaa gtctgtgttc  
 300  
 atccagacct gggttaacta ctgtcttcct tatgttgttc ctgtggggac gcctggggct  
 360

gctggcctcg tgattcctct ctttccctgc aggccacggt tcacctactt ccccttctcc  
 420  
 ctgggccacc gtcctgcat cgggcagcag tttgctcaga tggaggtgaa ggtggtcatg  
 480  
 gcaaaactgc tgcagaggct ggagttccgg ctggtgcccg ggcagcgctt cgggctgcag  
 540  
 gagcaggcca cactcaagcc actggac  
 567

<210> 3194

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3194

Met	Gln	Ile	Gln	Pro	Ser	Ala	Glu	Ser	Ala	Val	His	Ala	Leu	His	Ala
1				5				10					15		
Lys	Cys	Pro	Ala	Pro	Gly	Ser	Lys	Ser	Val	Phe	Ile	Gln	Thr	Trp	Val
			20					25					30		
Asn	Tyr	Cys	Leu	Pro	Tyr	Val	Val	Pro	Val	Gly	Thr	Pro	Gly	Ala	Ala
		35					40					45			
Gly	Leu	Val	Ile	Pro	Leu	Phe	Pro	Cys	Arg	Pro	Arg	Phe	Thr	Tyr	Phe
	50					55				60					
Pro	Phe	Ser	Leu	Gly	His	Arg	Ser	Cys	Ile	Gly	Gln	Gln	Phe	Ala	Gln
65					70				75					80	
Met	Glu	Val	Lys	Val	Val	Met	Ala	Lys	Leu	Gln	Arg	Leu	Glu	Phe	
			85					90				95			
Arg	Leu	Val	Pro	Gly	Gln	Arg	Phe	Gly	Leu	Gln	Glu	Gln	Ala	Thr	Leu
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Lys	Pro	Leu	Asp												
			115												

<210> 3195

<211> 987

<212> DNA

<213> Homo sapiens

<400> 3195

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 240  
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 360  
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 480

cagttcagcc tccttgaagc tgcccttgaa gacttcccga ctctacaata acttgagac  
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 720  
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 780  
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 840  
 gaccttcttc ctctctctca ctgggccagt ttcagctcac ttctccagg aagtctttcc  
 900  
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<210> 3196

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3196

Met	Glu	Glu	Pro	Leu	Gly	Ser	Asp	Pro	Phe	Ser	Trp	Lys	Leu	Pro	Ser
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Leu	Asp	Tyr	Glu	Arg	Lys	Thr	Lys	Val	Asp	Phe	Asp	Asp	Phe	Leu	Pro
			20					25					30		
Ala	Ile	Arg	Lys	Pro	Gln	Thr	Pro	Thr	Ser	Leu	Ala	Gly	Ser	Ala	Lys
			35				40					45			
Gly	Gly	Gln	Asp	Gly	Ser	Gln	Arg	Ser	Ser	Ile	His	Phe	Glu	Thr	Glu
	50					55					60				
Glu	Ala	Asn	Arg	Ser	Phe	Leu	Ser	Gly	Ile	Lys	Thr	Ile	Leu	Lys	Lys
65					70					75				80	
Ser	Pro	Glu	Pro	Lys	Glu	Asp	Pro	Ala	His	Leu	Ser	Asp	Ser	Ser	Ser
				85					90					95	
Ser	Ser	Gly	Ser	Ile	Val	Ser	Phe	Lys	Ser	Ala	Asp	Ser	Ile	Lys	Ser
			100					105					110		
Arg	Pro	Gly	Ile	Pro	Arg	Leu	Ala	Gly	Asp	Gly	Gly	Glu	Arg	Thr	Ser
		115					120					125			
Pro	Glu	Arg	Arg	Glu	Pro	Gly	Thr	Gly	Arg	Lys	Asp	Asp	Asp	Val	Ala
	130					135					140				
Ser	Ile	Met	Lys	Lys	Tyr	Leu	Gln	Lys							
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<210> 3197

<211> 5575

<212> DNA

<213> Homo sapiens

<400> 3197

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120  
agagcaatgg cgacactgga tcgcaaagtg cccagtcggg aggcgtttct gggcaaacc  
180  
tggtcctcct ggatcgacgc cgccaaatta cactgctcgg acaatgtaga tttagaagag  
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300  
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420  
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600  
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660  
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 5575

&lt;210&gt; 3198

&lt;211&gt; 833

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3198

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			20					25					30		
Asn	Val	Asp	Leu	Glu	Glu	Ala	Gly	Lys	Glu	Gly	Gly	Lys	Ser	Arg	Glu
		35					40					45			
Val	Met	Arg	Leu	Asn	Lys	Glu	Asp	Met	His	Leu	Phe	Gly	His	Tyr	Pro
	50				55						60				
Ala	His	Asp	Asp	Phe	Tyr	Leu	Val	Val	Cys	Ser	Ala	Cys	Asn	Gln	Val
65					70				75					80	
Val	Lys	Pro	Gln	Val	Phe	Gln	Ser	His	Cys	Glu	Arg	Arg	His	Gly	Ser
			85						90					95	
Met	Cys	Arg	Pro	Ser	Pro	Ser	Pro	Val	Ser	Pro	Ala	Ser	Asn	Pro	Arg
			100					105					110		
Thr	Ser	Leu	Val	Gln	Val	Lys	Thr	Lys	Ala	Cys	Leu	Ser	Gly	His	His
		115				120						125			
Ser	Ala	Ser	Ser	Thr	Ser	Lys	Pro	Phe	Lys	Thr	Pro	Lys	Asp	Asn	Leu
	130					135					140				
Leu	Thr	Ser	Ser	Ser	Lys	Gln	His	Thr	Val	Phe	Pro	Ala	Lys	Gly	Ser
145					150				155					160	
Arg	Asp	Lys	Pro	Cys	Val	Pro	Val	Pro	Val	Val	Ser	Leu	Glu	Lys	Ile
			165					170						175	
Pro	Asn	Leu	Val	Lys	Ala	Asp	Gly	Ala	Asn	Val	Lys	Met	Asn	Ser	Thr
		180						185					190		
Thr	Thr	Thr	Ala	Val	Ser	Ala	Ser	Pro	Thr	Ser	Ser	Ser	Ala	Val	Ser



195	200	205
Thr Pro Pro Leu Ile Lys	Pro Val Leu Met Ser Lys	Ser Val Pro Pro
210	215	220
Ser Pro Glu Lys Ile Leu	Asn Gly Lys Gly Ile Leu	Pro Thr Thr Ile
225	230	235
Asp Lys Lys His Gln	Asn Gly Thr Lys Asn Ser	Asn Lys Pro Tyr Arg
245	250	255
Arg Leu Ser Glu Arg Glu	Phe Asp Pro Asn Lys His	Cys Gly Val Leu
260	265	270
Asp Pro Glu Thr Lys Lys	Pro Cys Thr Arg Ser Leu	Thr Cys Lys Thr
275	280	285
His Ser Leu Ser His Arg	Arg Ala Val Pro Gly Arg	Lys Lys Gln Phe
290	295	300
Asp Leu Leu Leu Ala Glu	His Lys Ala Lys Ser Arg	Glu Lys Glu Val
305	310	315
Lys Asp Lys Glu His Leu	Leu Thr Ser Thr Arg Glu	Ile Leu Pro Ser
325	330	335
Gln Ser Gly Pro Ala Gln	Asp Ser Leu Leu Gly Ser	Ser Gly Ser Ser
340	345	350
Gly Pro Glu Pro Lys Val	Ala Ser Pro Ala Lys Ser	Arg Pro Pro Asn
355	360	365
Ser Val Leu Pro Arg Pro	Ser Ser Ala Asn Ser Ile	Ser Ser Ser Thr
370	375	380
Ser Ser Asn His Ser Gly	His Thr Pro Glu Pro Pro	Leu Pro Pro Val
385	390	395
Gly Gly Asp Leu Ala Ser	Arg Leu Ser Ser Asp Glu	Gly Glu Met Asp
405	410	415
Gly Ala Asp Glu Ser Glu	Lys Leu Asp Cys Gln Phe	Ser Thr His His
420	425	430
Pro Arg Pro Leu Ala Phe	Cys Ser Phe Gly Ser Arg	Leu Met Gly Arg
435	440	445
Gly Tyr Tyr Val Phe Asp	Arg Arg Trp Asp Arg Phe	Arg Phe Ala Leu
450	455	460
Asn Ser Met Val Glu Lys	His Leu Asn Ser Gln Met	Trp Lys Lys Ile
465	470	475
Pro Pro Ala Ala Asp Ser	Pro Met Pro Ser Pro Ala	Ala His Ile Thr
485	490	495
Thr Pro Val Pro Ala Ser	Val Leu Gln Pro Phe Ser	Asn Pro Ser Ala
500	505	510
Val Tyr Leu Pro Ser Ala	Pro Ile Ser Ser Arg Leu	Thr Ser Ser Tyr
515	520	525
Ile Met Thr Ser Ala Met	Leu Ser Asp Ala Ala Phe	Val Thr Ser Pro
530	535	540
Asp Pro Ser Ala Leu Met	Ser His Thr Thr Ala Phe	Pro His Val Ala
545	550	555
Ala Thr Leu Ser Ile Met	Asp Ser Thr Phe Lys Ala	Pro Ser Ala Val
565	570	575
Ser Pro Ile Pro Ala Val	Ile Pro Ser Pro Ser His	Lys Pro Ser Lys
580	585	590
Thr Lys Thr Ser Lys Ser	Ser Lys Val Lys Asp Leu	Ser Thr Arg Ser
595	600	605
Asp Glu Ser Pro Ser Asn	Lys Lys Arg Lys Pro Gln	Ser Ser Thr Ser
610	615	620
Ser Ser Ser Ser Ser Ser	Ser Ser Ser Leu Gln Thr	Ser Leu Ser Ser

625					630					635				640	
Pro	Leu	Ser	Gly	Pro	His	Lys	Lys	Asn	Cys	Val	Leu	Asn	Ala	Ser	Ser
				645					650					655	
Ala	Leu	Asn	Ser	Tyr	Gln	Ala	Ala	Pro	Pro	Tyr	Asn	Ser	Leu	Ser	Val
			660					665					670		
His	Asn	Ser	Asn	Asn	Gly	Val	Ser	Pro	Leu	Ser	Ala	Lys	Leu	Glu	Pro
		675					680				685				
Ser	Gly	Arg	Thr	Ser	Leu	Pro	Gly	Gly	Pro	Ala	Asp	Ile	Val	Arg	Gln
	690					695					700				
Val	Gly	Ala	Val	Gly	Gly	Ser	Ser	Asp	Ser	Cys	Pro	Leu	Ser	Val	Pro
705					710					715					720
Ser	Leu	Ala	Leu	His	Ala	Gly	Asp	Leu	Ser	Leu	Ala	Ser	His	Asn	Ala
				725				730						735	
Val	Ser	Ser	Leu	Pro	Leu	Ser	Phe	Asp	Lys	Ser	Glu	Gly	Lys	Lys	Arg
			740					745					750		
Lys	Asn	Ser	Ser	Ser	Ser	Ser	Lys	Ala	Cys	Lys	Ile	Thr	Lys	Met	Pro
		755					760					765			
Gly	Met	Asn	Ser	Val	His	Lys	Lys	Asn	Pro	Pro	Ser	Leu	Leu	Ala	Pro
	770					775					780				
Val	Pro	Asp	Pro	Val	Asn	Ser	Thr	Ser	Ser	Arg	Gln	Val	Gly	Lys	Asn
785					790					795					800
Ser	Ser	Leu	Ala	Leu	Ser	Gln	Ser	Ser	Pro	Ser	Ser	Ile	Ser	Ser	Pro
				805				810						815	
Gly	His	Ser	Arg	Gln	Asn	Thr	Asn	Arg	Thr	Gly	Arg	Ile	Arg	Thr	Leu
			820					825						830	
Pro															

&lt;210&gt; 3199

&lt;211&gt; 777

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3199

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 120  
 caagcagctc ccacagctgg cactggggaa cgtggtgaca ccagaagct tggagatgcc  
 180  
 aggaaccgca agggcccaaa gagagtgtca cagccctggc ttagggagct cctaggtctg  
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 aacatggcga gcaaggggca tgtctcagcc ctgtttgtga tacagctctt ttagccctgc  
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660  
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777

&lt;210&gt; 3200

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3200

Met	Leu	Gln	Val	Ala	Arg	Arg	Arg	Lys	Glu	Arg	Arg	Lys	Glu	Glu	Pro
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Leu	Leu	Phe	Gly	Gln	Pro	Arg	Pro	Arg	Ser	Ser	Leu	Ser	Gln	Gly	Cys
		20					25					30			
Asp	Thr	Leu	Phe	Gly	Ala	Leu	Arg	Phe	Leu	Ala	Ser	Pro	Ser	Phe	Trp
	35					40					45				
Val	Ser	Pro	Arg	Ser	Pro	Val	Pro	Ala	Val	Gly	Ala	Ala	Cys	Cys	Met
	50				55				60						
Pro	Gly	Pro	Ala	Thr	Ala	Ser	Gln	Arg	Ala	Gly	Ala	Leu	Thr	Ser	Thr
65				70				75					80		
Trp	Ser	Cys	Leu	Pro	His	Cys	Ser	Ser	Arg	Arg	Val				
			85					90							

&lt;210&gt; 3201

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3201

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120  
gaagccgaca gcctttggga ccgaggtcag cagctgcacc ggcgcaagaa ttccaaacac  
180  
agctgtggct gaagggcctg ggggtgtgca ggtcccaaac ccagtgagc ctgatcccga  
240  
catgggtcct gtctcctggg ggccaccttt gtgtcccggt gtggctgacc ctgagagggga  
300  
gggctgtggg gatgctcaca tgactctggg gtcccagcga cagccctcc tcacgtctgcg  
360  
tgtccctggg gcctctcagg agggacgcgt  
390

&lt;210&gt; 3202

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3202

Met Gly Thr Arg Lys Gln Leu Pro Ser Arg Leu Pro Gln Ala Gly Arg

1	5	10	15
Lys Gly His Ala Ala Gly Val Ser Thr Ala Lys Pro Thr Ala Phe			
	20	25	30
Gly Thr Glu Val Ser Ser Cys Thr Gly Ala Arg Ile Pro Asn Thr Ala			
	35	40	45
Val Ala Glu Gly Pro Gly Gly Val Gln Val Pro Asn Pro Ser Glu Pro			
	50	55	60
Asp Pro Asp Met Gly Pro Val Ser Trp Gly Pro Pro Leu Cys Pro Val			
65	70	75	80
Val Ala Asp Pro Glu Arg Glu Gly Cys Gly Asp Ala His Met Thr Leu			
	85	90	95
Gly Ser Gln Arg Gln Pro Leu Leu Thr Leu Arg Val Pro Gly Ala Ser			
	100	105	110
Gln Glu Gly Arg			
	115		

&lt;210&gt; 3203

&lt;211&gt; 1906

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3203

```

ngaattcggc acgagctcgt gccgaatcgg cagcagcgcg ggcccaggag cggcaggact
60
cgggccggag cgtggccgga cccccaccg cagagggggcc cagggaggac gcggcagagt
120
cacggtggca gcattgagag ttggacaccc gggtccttga agtgatctct agggcccagc
180
cccaaaccg ccaccattcc gtgtgcggg gacaccatgg ctccagaaga ggacgtgga
240
ggggaggcct tagggggcag tttctgggag gctggcaact acaggcgac ggtacagcg
300
gtggaggacg ggcaccggct gtgcggggac ctggtcagct gcttcagga gcgcgcccgc
360
atcgagaagg cttatgccc gacgttggt gactggggccc gaaagtggag ggggaccgtg
420
gagaaggggc ccagtatgg cacttgag aaggcctggc atgcctttt cacggcggct
480
gagcggtgca gcgcgtgca cctggagggtg cgggagaagc tgcaagggca ggacagtga
540
cgggtgcgag cctggcagcg gggggcttcc caccggcctg tctggggcg cttccgcgag
600
agccggggcg ccgaggacg cttccgcaag gccagaagc cctggctgaa gaggtgaag
660
gaggttgagg cttccaagaa aagctaccac gcagcccga aggatgagaa gaccgcccag
720
acgagggaga gccacgcaa ggcagacag cccgtctccc aggagcagct gcgcaaactg
780
caggaacggg tggaacgtg tgccaaggag gccgagaaga caaaagctca gtatgagcag
840
acgctggcag agctgcacg ctacaactca cgctacatgg aggacatgga acaggccttt
900
gagacctgcc aggccgcca gcgccagcg cttcttttct tcaaggatat gctgctcacc
960

```

ttacaccagc acctggacct ttccagcagt gagaagttcc atgaactcca ccgtagcttg  
 1020  
 caccagggca ttgaggcagc cagtgcagaa gaggatctgc gctgggtggcg cagcaccac  
 1080  
 gggccaggca tggccatgaa ctggccacag ttccaggagt ggtccttgga cacacagagg  
 1140  
 acaatcagcc ggaaagagaa ggggtggccgg agccctgatg aggttaccct gaccagcatt  
 1200  
 gtgcctacaa gagatggcac cgcaccccca cccagtcctc cgggggtcccc aggcacgggg  
 1260  
 caggatgagg agtggtcaga tgaagagagt ccccggaagg ctgccaccgg ggttcgggtg  
 1320  
 agggcactct atgactacgc tggccaggaa gctgatgagc tgagcttccg agcaggggag  
 1380  
 gagctgctga agatgagtga ggaggacgag cagggtctgt gccaaggcca gttgcagagt  
 1440  
 ggccgcattg gcctgtacct tgccaactac gtggagtgtg tgggcgcctg agtgtctga  
 1500  
 cagcccttct gcaacgttta cccaccctgg ttccagagccc agcttctcct ggagagccgg  
 1560  
 accctcaggg cctgaaccg tcgctctctg gctgctctc tgteccctga gggaggaagt  
 1620  
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 1680  
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 1740  
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 1800  
 ttggggtgag tgtagttctg gcctagcagc accctcttgt ggcttgttct agcgtgtatt  
 1860  
 aaaacttgac acacaccac acacaaaaac aaaaacacca aaaaaa  
 1906

&lt;210&gt; 3204

&lt;211&gt; 424

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3204

Met	Ala	Pro	Glu	Asp	Ala	Gly	Gly	Glu	Ala	Leu	Gly	Gly	Ser	Phe
1			5					10					15	
Trp	Glu	Ala	Gly	Asn	Tyr	Arg	Arg	Thr	Val	Gln	Arg	Val	Glu	Asp
			20					25					30	Gly
His	Arg	Leu	Cys	Gly	Asp	Leu	Val	Ser	Cys	Phe	Gln	Glu	Arg	Ala
			35					40					45	Arg
Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Ala	Asp	Trp	Ala	Arg	Lys
			50					55					60	Trp
Arg	Gly	Thr	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Leu	Glu	Lys
			65					70					75	Ala
Trp	His	Ala	Phe	Phe	Thr	Ala	Ala	Glu	Arg	Leu	Ser	Ala	Leu	His
			85					90					95	Leu
Glu	Val	Arg	Glu	Lys	Leu	Gln	Gly	Gln	Asp	Ser	Glu	Arg	Val	Arg
			100					105					110	Ala
Trp	Gln	Arg	Gly	Ala	Phe	His	Arg	Pro	Val	Leu	Gly	Gly	Phe	Arg
														Glu

115 120 125  
 Ser Arg Ala Ala Glu Asp Gly Phe Arg Lys Ala Gln Lys Pro Trp Leu  
 130 135 140  
 Lys Arg Leu Lys Glu Val Glu Ala Ser Lys Lys Ser Tyr His Ala Ala  
 145 150 155 160  
 Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala  
 165 170 175  
 Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val  
 180 185 190  
 Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln  
 195 200 205  
 Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met  
 210 215 220  
 Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu Leu  
 225 230 235 240  
 Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser  
 245 250 255  
 Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly Ile  
 260 265 270  
 Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr His  
 275 280 285  
 Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser Leu  
 290 295 300  
 Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser Pro  
 305 310 315 320  
 Asp Glu Val Thr Leu Thr Ser Ile Val Pro Thr Arg Asp Gly Thr Ala  
 325 330 335  
 Pro Pro Pro Gln Ser Pro Gly Ser Pro Gly Thr Gly Gln Asp Glu Glu  
 340 345 350  
 Trp Ser Asp Glu Glu Ser Pro Arg Lys Ala Ala Thr Gly Val Arg Val  
 355 360 365  
 Arg Ala Leu Tyr Asp Tyr Ala Gly Gln Glu Ala Asp Glu Leu Ser Phe  
 370 375 380  
 Arg Ala Gly Glu Glu Leu Leu Lys Met Ser Glu Glu Asp Glu Gln Gly  
 385 390 395 400  
 Trp Cys Gln Gly Gln Leu Gln Ser Gly Arg Ile Gly Leu Tyr Pro Ala  
 405 410 415  
 Asn Tyr Val Glu Cys Val Gly Ala  
 420

&lt;210&gt; 3205

&lt;211&gt; 1482

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3205

nnggagatgg aggaacctc cccgagcagc ccaccacca gtggggtgcg gtcccccccg  
 60  
 ggtctgacca agacacccct atctgtcttg ggctgaaac ctcacaaccc agcggacatc  
 120  
 ctgttgacc ccacaggaga gccccggagc tatgtggagt ctgtggcacg gacagcggtg  
 180  
 gctggacccc gagctcagga ctctgagccc aagagcttta gtgtccagc caccaggcc  
 240

tatggccatg agataccctt gaggaacggg accctgggtg gctcctttgt cccccccagc  
 300  
 cccctctcca ccagcagccc catcctcagt gctgacagca cttcagtggg gagtttcccg  
 360  
 tcgggagaga gcagtgacca ggggtccccg acgcccaccc agcctctgtt ggagtctggc  
 420  
 ttccgctcag gcagcctggg acagcccagc ccgtctgccc agagaaacta ccagagctct  
 480  
 tctcctctcc cgactgtggg cagtagctac agcagccccg actactcact tcagcatttc  
 540  
 agtcctctc cggaaagcca ggctcgagct cagttcagtg tggctggcgt ccacacggtg  
 600  
 cctgggagcc ctcaggcgcg tcacagaaca gtgggcacca acactcccc tagtctggc  
 660  
 ttccgctggc gggccatcaa tcccagcatg gctgccccca gcagtcccag tttagccat  
 720  
 caccagatga tgggtccacc aggcactggc ttccatggta gcactgtctc cagccccag  
 780  
 agcagtgcag cgaccacccc ggggagcccc agcctgtgtc ggcaccacgc aggggtctac  
 840  
 caggtttctg gctccacaa caaagtggcc accaccccg ggagtcccag cctgggccgg  
 900  
 caccctgggg ctcaccaagg caacctggcc tccggtcttc atagcaatgc aatagccagc  
 960  
 cctggaagcc ccagcctggg ccgtcacctc ggagggctctg gatctgtggt tcccggcagc  
 1020  
 ccctgcttgg accggcatgt ggcctatggc ggctattcta ccccgaggga tcggagaccc  
 1080  
 acactgtccc ggcagagcag tgctctggc taccaggctc ctccacgcc ctcttccct  
 1140  
 gtctccctg cctactaccc tggcctgagc agcctgcca cctccccgct accagactcc  
 1200  
 gcagccttcc ggcaaggag cccaacacca gccttgccag agaagcgaag gatgtcagt  
 1260  
 ggagaccggg caggcagcct cccaactat gccaccatca atgggaagg gtcttgcct  
 1320  
 gtcgccagcg gcattgccag tcccagtggg ggcagcaccg tctccttctc ccacactctg  
 1380  
 cccgacttct ccaagtactc catgccagac aacagcccg agacgcgggc taaagtgaag  
 1440  
 ttgtccagg acatttctaa gtattggtac aagcctaaga tc  
 1482

&lt;210&gt; 3206

&lt;211&gt; 494

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3206

Xaa Glu Met Glu Gly Thr Ser Pro Ser Ser Pro Pro Pro Ser Gly Val  
 1 5 10 15  
 Arg Ser Pro Pro Gly Leu Ala Lys Thr Pro Leu Ser Ala Leu Gly Leu  
 20 25 30  
 Lys Pro His Asn Pro Ala Asp Ile Leu Leu His Pro Thr Gly Glu Pro

35	40	45
Arg Ser Tyr Val Glu Ser Val Ala Arg Thr Ala Val Ala Gly Pro Arg		
50	55	60
Ala Gln Asp Ser Glu Pro Lys Ser Phe Ser Ala Pro Ala Thr Gln Ala		
65	70	75
Tyr Gly His Glu Ile Pro Leu Arg Asn Gly Thr Leu Gly Gly Ser Phe		
85	90	95
Val Ser Pro Ser Pro Leu Ser Thr Ser Ser Pro Ile Leu Ser Ala Asp		
100	105	110
Ser Thr Ser Val Gly Ser Phe Pro Ser Gly Glu Ser Ser Asp Gln Gly		
115	120	125
Pro Arg Thr Pro Thr Gln Pro Leu Leu Glu Ser Gly Phe Arg Ser Gly		
130	135	140
Ser Leu Gly Gln Pro Ser Pro Ser Ala Gln Arg Asn Tyr Gln Ser Ser		
145	150	155
Ser Pro Leu Pro Thr Val Gly Ser Ser Tyr Ser Ser Pro Asp Tyr Ser		
165	170	175
Leu Gln His Phe Ser Ser Ser Pro Glu Ser Gln Ala Arg Ala Gln Phe		
180	185	190
Ser Val Ala Gly Val His Thr Val Pro Gly Ser Pro Gln Ala Arg His		
195	200	205
Arg Thr Val Gly Thr Asn Thr Pro Pro Ser Pro Gly Phe Gly Trp Arg		
210	215	220
Ala Ile Asn Pro Ser Met Ala Ala Pro Ser Ser Pro Ser Leu Ser His		
225	230	235
His Gln Met Met Gly Pro Pro Gly Thr Gly Phe His Gly Ser Thr Val		
245	250	255
Ser Ser Pro Gln Ser Ser Ala Ala Thr Thr Pro Gly Ser Pro Ser Leu		
260	265	270
Cys Arg His Pro Ala Gly Val Tyr Gln Val Ser Gly Leu His Asn Lys		
275	280	285
Val Ala Thr Thr Pro Gly Ser Pro Ser Leu Gly Arg His Pro Gly Ala		
290	295	300
His Gln Gly Asn Leu Ala Ser Gly Leu His Ser Asn Ala Ile Ala Ser		
305	310	315
Pro Gly Ser Pro Ser Leu Gly Arg His Leu Gly Gly Ser Gly Ser Val		
325	330	335
Val Pro Gly Ser Pro Cys Leu Asp Arg His Val Ala Tyr Gly Gly Tyr		
340	345	350
Ser Thr Pro Glu Asp Arg Arg Pro Thr Leu Ser Arg Gln Ser Ser Ala		
355	360	365
Ser Gly Tyr Gln Ala Pro Ser Thr Pro Ser Phe Pro Val Ser Pro Ala		
370	375	380
Tyr Tyr Pro Gly Leu Ser Ser Pro Ala Thr Ser Pro Ser Pro Asp Ser		
385	390	395
Ala Ala Phe Arg Gln Gly Ser Pro Thr Pro Ala Leu Pro Glu Lys Arg		
405	410	415
Arg Met Ser Val Gly Asp Arg Ala Gly Ser Leu Pro Asn Tyr Ala Thr		
420	425	430
Ile Asn Gly Lys Val Ser Ser Pro Val Ala Ser Gly Met Ser Ser Pro		
435	440	445
Ser Gly Gly Ser Thr Val Ser Phe Ser His Thr Leu Pro Asp Phe Ser		
450	455	460
Lys Tyr Ser Met Pro Asp Asn Ser Pro Glu Thr Arg Ala Lys Val Lys		



2419

&lt;400&gt; 3209

tgttcctcta ggtggggcag gtagggggtc cagcttcttg ctgctgggtg gttcagggtca  
60  
tgcgccagc ctgtccctt ctgacctggg ccctaccac ggggaaatgt tcccatagca  
120  
gaagaatcag cccacagtg caggggtgtg ttagtgggga acgggctctg ggctcctgtg  
180  
ggaaccaggg acccctatc ttggtaccgg tcattggatg tatccccagc tcatgcctgt  
240  
gtctgtcttg gcccggtggg tcacctgtg ttcattcttc tccagccat ggctctcaa  
300  
actgggggtt tcgtctccct atgagggggt cctggtatgt acgcgt  
346

&lt;210&gt; 3210

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3210

Met	Arg	Pro	Ala	Leu	Ser	Leu	Leu	Thr	Trp	Ala	Leu	Pro	Thr	Gly	Lys
1				5				10						15	
Cys	Ser	His	Ser	Arg	Arg	Ile	Ser	Pro	Thr	Val	Gln	Gly	Cys	Val	Ser
			20				25						30		
Gly	Glu	Arg	Ala	Leu	Gly	Ser	Cys	Gly	Asn	Gln	Gly	Pro	Pro	Ile	Leu
		35				40					45				
Val	Pro	Val	Ile	Gly	Cys	Ile	Pro	Ser	Ser	Cys	Leu	Cys	Leu	Ser	Trp
	50				55					60					
Pro	Val	Trp	Ser	Pro	Cys	Val	His	Leu	Ser	Pro	Ser	His	Gly	Leu	Ser
65				70				75						80	
Asn	Trp	Gly	Phe	Arg	Leu	Pro	Met	Arg	Gly	Ser	Trp	Tyr	Val	Arg	
			85					90						95	

&lt;210&gt; 3211

&lt;211&gt; 1728

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3211

tccggaaata taaagttgag ctaccagttt tcagaaatcc atgaagactc taccgtctgc  
60  
tggaacaaag attccaagtc gatagcccag gccaaagaaa gcgcagggga caactccagt  
120  
gtttccttgg ccacgtgca agccagtcgg aaggaccagg gactctatta ctgctgcac  
180  
aagaacagct acggaaaagt gactgtgaa tttaacctca cagctgaagt tctcaaacag  
240  
ctgtcaagtc acacagaata ctaaaggatg tgaagagatt gaattcagcc aactcatctt  
300  
caaagaagac ttctccatg acagctactt tgggggccgc ctgctgggtc agatcgccac  
360  
ggaggagctg cactttggag aaggggttca ccgcaaagcc ttccgcagca cagtgatgca  
420

cggectcatg cctgtcttca aacctggcca tgccgtgtg cttaagggtgc acaatgccat  
 480  
 tgcctatggg accagaaata atgatgagct catccaaagg aactacaaac tgcgtgccca  
 540  
 ggaatgctat gttcaaaata ctgccaggta ttatgccaaag atctacgctg ctgaagcaca  
 600  
 gcctctggaa ggctttggag aagtacctga gatcattcct atttttctta tccatcgccc  
 660  
 tgagaacaat atcccgtatg ctacagtggg ggaggagctg attggagaat ttgtgaagta  
 720  
 ttccatcagg gatgggaaag aaataaactt cttgagaaga gaatcagaag ctggtcagaa  
 780  
 atgttgacc ttccagcact ggggtgtacca gaaaacaagt ggctgcctcc tgggtacgga  
 840  
 catgcaaggt gtaggaatga agctaactga cggtggcata gcaacgctgg cttaaagggt  
 900  
 caagggattt aaaggcaact gttccatgac cttcattgat cagtttaaag cactacacca  
 960  
 gtgtaacaag tattgcaaaa tgctgggact gaaatccctt caaaacaaca accagaaaca  
 1020  
 gaagcagccg agcattggga aaagcaaagt tcaaacaac tctatgacag taaagaaggc  
 1080  
 agggcctgag accccaggcg aaaagaaaac ctaacgtccc cgggtaacct aatggccact  
 1140  
 ggctagcagc acacaatctc gccagggaaa atctgaggcc acacaggaga gaatatacag  
 1200  
 cctgcagaga gtgcgtggca atccttactc ccagccgact gtgcgccaag atgcttctaa  
 1260  
 acccatcacc tgctgtcttc actcaaatga ttccagaaca ggatttgca ccagggttat  
 1320  
 ggggagattg aatcaacgat tgggtctcaa gacagtccat tctttatata catgttttagc  
 1380  
 atttttacca acctcacatc atgtgtatat ttgtgtattt gcacatgggt gtgctgtcga  
 1440  
 ggacctgggt ctgagaagag tctgttcaca gccaaaattc ttccactgt cattcctaac  
 1500  
 ctgggatttc tagacacatc ctgctgtgat gtaaacagaa atcacgaatt cgctcactgg  
 1560  
 atcaagtgtg tccactgggt tctaatacgc tattgttgcc ggagggtgggt tctgtgacgt  
 1620  
 gaagccattt cccatcattc aacagccagt tacaattttc tgtttaatta aattcatatt  
 1680  
 taacaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1728

&lt;210&gt; 3212

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3212

Ser Gly Asn Ile Lys Leu Ser Tyr Gln Phe Ser Glu Ile His Glu Asp

1

5

10

15

Ser Thr Val Cys Trp Thr Lys Asp Ser Lys Ser Ile Ala Gln Ala Lys

20 25 30  
 Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala  
 35 40 45  
 Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr  
 50 55 60  
 Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln  
 65 70 75 80  
 Leu Ser Ser His Thr Glu Tyr  
 85

&lt;210&gt; 3213

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3213

acgcgtgaag gggaagcggc ggggtagtaa cagattatgg gcaacagtcc ttttaattaa  
 60  
 tctaccgtca tcattggctaa tgaggactgt cccaaggctg ctgatagtcc tttttcatca  
 120  
 gataaacatg cccaactcat cttggcccaa atcaataaga tgagaaatgg acagcatttc  
 180  
 tgtgatgtgc agctgcaagt tggacaggaa agttttaaag ctcatcggct gggttttggt  
 240  
 gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaaagat  
 300  
 gttgtaccga ttctaggaat tgaagcagga atctttcaga tacttcta  
 348

&lt;210&gt; 3214

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3214

Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser  
 1 5 10 15  
 Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn  
 20 25 30  
 Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe  
 35 40 45  
 Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala  
 50 55 60  
 Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile  
 65 70 75 80  
 Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu  
 85 90

&lt;210&gt; 3215

&lt;211&gt; 597

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3215

acgcgtgcgc gctcccggca ggagagggcc agccggcccc ggcttaccat cttgaacgtg  
60  
tgcaacactg gggacaagat ggtggagtgc cagctggaga cgcacaacca caagatgggtg  
120  
accttcaagt tcgacttgga cggggacgca cccgatgaaa ttgccacgta tatgggtggag  
180  
catgacttta tcctgcaggc cgagcgggaa acgttcacgc agcagatgaa ggatgtcatg  
240  
gacaaggcag aggacatgct cagcgaggac acagacgccg accgtggctc cgacccaggg  
300  
accagccgc cacaactcag cacctgcggc ctgggcaccg gggaggagag ccgacaatcc  
360  
caagccaacg cccccgtgta tcagcagaac gtctgcaca ccgggaagag gtgggttcac  
420  
atctgtccgg tgctgagcc ccccgcccc gagggccctt gaattctgc cccacttcc  
480  
tctaagctcc ctgccgccag aagccagcca agattcagcg ccctataaag accagctgtc  
540  
ctcgaaggaa caaccagct ttctagccag tcagcagctc ctgggccagg cgggccc  
597

&lt;210&gt; 3216

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3216

Thr	Arg	Ala	Arg	Ser	Arg	Gln	Glu	Arg	Ala	Ser	Arg	Pro	Arg	Leu	Thr
1				5					10					15	
Ile	Leu	Asn	Val	Cys	Asn	Thr	Gly	Asp	Lys	Met	Val	Glu	Cys	Gln	Leu
			20					25					30		
Glu	Thr	His	Asn	His	Lys	Met	Val	Thr	Phe	Lys	Phe	Asp	Leu	Asp	Gly
		35				40					45				
Asp	Ala	Pro	Asp	Glu	Ile	Ala	Thr	Tyr	Met	Val	Glu	His	Asp	Phe	Ile
	50				55				60						
Leu	Gln	Ala	Glu	Arg	Glu	Thr	Phe	Ile	Glu	Gln	Met	Lys	Asp	Val	Met
65				70					75					80	
Asp	Lys	Ala	Glu	Asp	Met	Leu	Ser	Glu	Asp	Thr	Asp	Ala	Asp	Arg	Gly
			85					90					95		
Ser	Asp	Pro	Gly	Thr	Ser	Pro	Pro	His	Leu	Ser	Thr	Cys	Gly	Leu	Gly
			100					105					110		
Thr	Gly	Glu	Glu	Ser	Arg	Gln	Ser	Gln	Ala	Asn	Ala	Pro	Val	Tyr	Gln
		115				120						125			
Gln	Asn	Val	Leu	His	Thr	Gly	Lys	Arg	Trp	Phe	Ile	Ile	Cys	Pro	Val
	130					135					140				
Pro	Glu	Pro	Pro	Ala	Pro	Glu	Gly	Pro							
145						150									

&lt;210&gt; 3217

&lt;211&gt; 2570

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3217

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360  
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&lt;210&gt; 3218

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3218

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			20					25					30		
Asn	Met	Glu	Asp	Leu	Arg	Glu	Gln	Thr	His	Thr	Arg	His	Tyr	Glu	Leu
		35					40					45			
Tyr	Arg	Arg	Cys	Lys	Leu	Glu	Met	Gly	Phe	Thr	Asp	Val	Gly	Pro	
		50				55				60					
Glu	Asn	Lys	Pro	Val	Ser	Val	Gln	Glu	Thr	Tyr	Glu	Ala	Lys	Arg	His
65					70				75					80	
Glu	Phe	His	Gly	Glu	Arg	Gln	Arg	Lys	Glu	Glu	Glu	Met	Lys	Gln	Met
			85					90					95		
Phe	Val	Gln	Arg	Val	Lys	Glu	Lys	Glu	Ala	Ile	Leu	Lys	Glu	Ala	Glu
			100					105					110		
Arg	Glu	Leu	Gln	Ala	Lys	Phe	Glu	His	Leu	Lys	Arg	Leu	His	Gln	Glu

	115		120		125	
Glu	Arg	Met	Lys	Leu	Glu	Glu
	130		135		140	
Ile	Ala	Phe	Ser	Lys	Lys	Lys
145			150		155	160
Ser	Phe	Leu	Ala	Thr	Gly	Ser
	165		170		175	
Asn	Ser	Asn	Phe	Leu		
	180					

&lt;210&gt; 3219

&lt;211&gt; 1241

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3219

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 180  
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 240  
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 360  
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 480  
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 720  
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 1080  
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 1140



ccccagcct ctctccctgg cctcactgct cagcctctgc tctcaccaaa ggaagcgact  
 1200  
 tcagaccct cccggactcc agaggaggag ccattgaatt c  
 1241

<210> 3220

<211> 413

<212> PRT

<213> Homo sapiens

<400> 3220

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Leu	Gly	Cys	Ala	Ser	Ser	Gly	Arg	His	Val	Val	Pro	Ala	Gln	Val	His
		20					25					30			
Val	Asn	Gly	Gly	Xaa	Val	Thr	Ser	Glu	Arg	Glu	Thr	Asp	Ile	Leu	Asp
	35						40					45			
Asp	Glu	Leu	Pro	Asn	Gln	Asp	Gly	His	Ser	Ala	Gly	Ser	Met	Gly	Thr
50					55						60				
Leu	Ser	Ser	Leu	Asp	Gly	Val	Thr	Asn	Ile	Ser	Glu	Gly	Gly	Tyr	Pro
65				70					75					80	
Glu	Ala	Leu	Ser	Pro	Leu	Thr	Asn	Gly	Leu	Asp	Lys	Ser	Tyr	Pro	Met
				85					90					95	
Glu	Pro	Met	Val	Asn	Gly	Gly	Gly	Tyr	Pro	Tyr	Glu	Ser	Ala	Ser	Arg
		100						105					110		
Ala	Gly	Pro	Ala	His	Ala	Gly	His	Thr	Ala	Pro	Met	Arg	Pro	Ser	Tyr
	115						120					125			
Ser	Ala	Gln	Glu	Gly	Leu	Ala	Gly	Tyr	Gln	Arg	Glu	Gly	Pro	His	Pro
130					135						140				
Ala	Trp	Pro	Gln	Pro	Val	Thr	Thr	Ser	His	Tyr	Ala	His	Asp	Pro	Ser
145				150						155				160	
Gly	Met	Phe	Arg	Ser	Gln	Ser	Phe	Ser	Glu	Ala	Glu	Pro	Gln	Leu	Pro
			165					170						175	
Pro	Ala	Pro	Val	Arg	Gly	Gly	Ser	Ser	Arg	Glu	Ala	Val	Gln	Arg	Gly
		180						185					190		
Leu	Asn	Ser	Trp	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Pro	Arg	Pro
	195					200						205			
Pro	Pro	Arg	Gln	Gln	Glu	Arg	Ala	His	Leu	Glu	Ser	Leu	Val	Ala	Ser
210					215						220				
Arg	Pro	Ser	Pro	Gln	Pro	Leu	Ala	Glu	Thr	Pro	Ile	Pro	Ser	Leu	Pro
225				230						235				240	
Glu	Phe	Pro	Arg	Ala	Ala	Ser	Gln	Gln	Glu	Ile	Glu	Gln	Ser	Ile	Glu
			245						250					255	
Thr	Leu	Asn	Met	Leu	Met	Leu	Asp	Leu	Glu	Pro	Ala	Ser	Ala	Ala	Ala
		260					265						270		
Pro	Leu	His	Lys	Ser	Gln	Ser	Val	Pro	Gly	Ala	Trp	Pro	Gly	Ala	Ser
	275						280					285			
Pro	Leu	Ser	Ser	Gln	Pro	Leu	Ser	Gly	Ser	Ser	Arg	Gln	Ser	His	Pro
	290					295					300				
Leu	Thr	Gln	Ser	Arg	Ser	Gly	Tyr	Ile	Pro	Ser	Gly	His	Ser	Leu	Gly
305				310						315				320	
Thr	Pro	Glu	Pro	Ala	Pro	Arg	Ala	Ser	Leu	Glu	Ser	Val	Pro	Pro	Gly
			325					330						335	
Arg	Ser	Tyr	Ser	Pro	Tyr	Asp	Tyr	Gln	Pro	Cys	Leu	Ala	Gly	Pro	Asn

	340		345		350										
Gln	Asp	Phe	His	Ser	Lys	Ser	Pro	Ala	Ser	Ser	Ser	Leu	Pro	Ala	Phe
	355						360					365			
Leu	Pro	Thr	Thr	His	Ser	Pro	Pro	Gly	Pro	Gln	Gln	Pro	Pro	Ala	Ser
	370						375					380			
Leu	Pro	Gly	Leu	Thr	Ala	Gln	Pro	Leu	Leu	Ser	Pro	Lys	Glu	Ala	Thr
385					390					395				400	
Ser	Asp	Pro	Ser	Arg	Thr	Pro	Glu	Glu	Glu	Pro	Leu	Asn			
			405					410							

&lt;210&gt; 3221

&lt;211&gt; 1585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3221

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120
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360
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420
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480
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600
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660
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720
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780
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1140

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 1585

&lt;210&gt; 3222

&lt;211&gt; 331

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3222

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		20						25					30		
Gln	Ala	Thr	Gly	Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys
		35					40				45				
His	Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu
	50				55					60					
Cys	Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala
65				70					75				80		
Pro	Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr
			85					90				95			
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys
		100					105				110				
Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val
	115				120				125						
Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu
130					135				140						
Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala
145				150				155					160		
Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly
		165					170					175			
Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro
		180					185					190			
Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg
	195					200					205				
Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn
	210				215						220				
Ser	Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr
225				230				235					240		
Met	Ser	Thr	Leu	Gln	Met	Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile

				245					250					255
Thr	Pro	Ser	Gly	Ser	Val	Ile	Ser	Lys	Phe	Asn	Ser	Thr	Thr	Ser
			260					265					270	
Ala	Thr	Pro	Gln	Ala	Phe	Asp	Ser	Ser	Ser	Ala	Val	Val	Phe	Ile
		275					280					285		
Val	Ser	Thr	Ala	Val	Val	Val	Leu	Val	Ile	Leu	Thr	Met	Thr	Val
	290					295					300			
Gly	Leu	Val	Lys	Leu	Cys	Phe	His	Glu	Ser	Pro	Ser	Ser	Gln	Pro
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Lys	Glu	Ser	Met	Gly	Pro	Pro	Gly	Cys	Asp	Glu				
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&lt;210&gt; 3223

&lt;211&gt; 985

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3223

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985

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&lt;210&gt; 3224

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3224

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 20           25           30
Val Ile Gly Val Ile Leu Gly Ala Glu Ala Ser Arg Arg Tyr Lys Lys
 35           40           45
Val Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala
 50           55           60
Thr Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu
 65           70           75           80
Leu Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys
 85           90           95
Asn Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg
100           105           110
Cys Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Gly His Ile Leu
115           120           125
Gly Asp Ala Gly Ser Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val Leu
130           135           140
Arg Pro Gly Ala Leu Thr Pro Leu Gln Arg Phe Arg Ser Leu Gln Gln
145           150           155           160
Ser Phe Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly Cys Phe
165           170           175
Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala Trp Gln
180           185           190
Pro Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn Asp Leu
195           200           205
Glu Arg Gln Gly Leu Leu Ser Gly Ala Gly Ala Ser Thr Glu Glu Pro
210           215           220

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&lt;210&gt; 3225

&lt;211&gt; 506

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3225

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420

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 506

<210> 3226  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 3226  
 Met Lys Val Ile Phe Pro Lys Leu Lys Gln Arg Asn Ile Leu Asn Gly  
 1 5 10 15  
 Leu Arg Pro Cys Thr Phe Phe Ile Gln Glu Ala Thr Lys Asn Ser Ala  
 20 25 30  
 Cys Phe Pro Val Pro Lys Met Pro Val Pro Cys Ala Leu Gly Glu Glu  
 35 40 45  
 Leu Val Pro Cys His Arg Gly Thr Gly Pro Ala Val Val Trp Pro Ala  
 50 55 60  
 Gln Pro Gln Gln Gly Glu Val Glu Pro Gln Pro Gln Pro Thr Gln Arg  
 65 70 75 80  
 Met Glu Pro Pro Ser Ala Ala Lys Asn Asn His Thr Ala Phe Glu Val  
 85 90 95  
 Ser His Pro Arg Cys Arg Trp Gly Cys Met Lys Leu His Glu His Gly  
 100 105 110  
 Met Ser Phe Ile Phe Arg Val Pro Arg Gly His Glu Trp Tyr Gln Asp  
 115 120 125  
 Pro Trp Arg Cys Pro Trp Phe Pro Met  
 130 135

<210> 3227  
 <211> 1623  
 <212> DNA  
 <213> Homo sapiens

<400> 3227  
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 agactgagag aggaaaggat agaggaagtg ctgccctagg ctgcatgagt cgaagcaagc  
 120  
 gtgtttcctt cccgccaggc aagtgcctt agaaaccggg ccccgcccc ttcttggcct  
 180  
 gcattcccat cccctctccc ggggcggagg tgaggacctc cttggttctt ttggttctgt  
 240  
 cagtgaagccc cttcttggc catgaagctc gtgaggaaga acatcgagaa ggacaatgcg  
 300  
 ggccaggtga ccttggctcc cgaggagcct gaggacatgt ggcacactta caacctcgtg  
 360  
 caggtggggc acagcctgcg cgctccacc atccgcaagg tacagacaga gtcctccacg  
 420  
 ggcagcgtgg gcagcaaccg ggtccgact accctcactc tctgcgtgga ggccatcgac  
 480  
 ttcgactctc aagcctgccca gctgcggggt aaggggacca acatccaaga gaatgagtat  
 540

gtcaagatgg gggcttacca caccatcgag ctggagccca accgccagtt caccctggcc  
 600  
 aagaagcagt gggatagtgt ggtactggag cgcacgagc aggcctgtga cccagcctgg  
 660  
 agcgtgatg tggcggtgt ggtcatgcag gaaggcctcg cccatatctg cttagtcaact  
 720  
 cccagcatga ccctcactcg ggccaagggt gaggtgaaca tccctaggaa aaggaaaggc  
 780  
 aattgtcttc agcatgaccg ggccttggag cggttctatg aacagggtgt ccaggctatc  
 840  
 cagcgccaca tacactttga tgttgtaaag tgcacctcgg tggccagccc aggatttgtg  
 900  
 agggagcagt tctgcgacta catgtttcaa caagcagtga agaccgacaa caaactgctc  
 960  
 ctggaaaacc ggtccaaatt tcttcaggta catgcctcct ccggacacaa gtactccctg  
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 aaagaggccc tttgtgacct tactgtggct agccgccttt cagacactaa agctgctggg  
 1080  
 gaagtcaaag ccttggatga cttctataaa atgttacagc atgaaccgga tcgagctttc  
 1140  
 tatggactca agcagggtga gaaggccaat gaagccatgg caattgacac attgctcatc  
 1200  
 agcgtatgagc tcttcaggca tcaggatgta gccacacgga gccggtatgt gaggctgggtg  
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 1320  
 gaacagctca gccagttgac tggggtagct gccattctcc gcttcctgt tcccgaactt  
 1380  
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 1440  
 acaatcttgt gtttctctaa ctgttacagt acatttctca gcacctctgt gacagaaagc  
 1500  
 tgcaagaatg gcactttttg attcatacag ggatttctta tgtctttggc tacactagat  
 1560  
 attttgtgat tggcaagaca tgtatttaaa caataaacta aaaggaaata aaaaaaaaaa  
 1620  
 aaa  
 1623

&lt;210&gt; 3228

&lt;211&gt; 385

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3228

Met	Lys	Leu	Val	Arg	Lys	Asn	Ile	Glu	Lys	Asp	Asn	Ala	Gly	Gln	Val
1				5				10					15		
Thr	Leu	Val	Pro	Glu	Glu	Pro	Glu	Asp	Met	Trp	His	Thr	Tyr	Asn	Leu
			20					25					30		
Val	Gln	Val	Gly	Asp	Ser	Leu	Arg	Ala	Ser	Thr	Ile	Arg	Lys	Val	Gln
		35					40					45			
Thr	Glu	Ser	Ser	Thr	Gly	Ser	Val	Gly	Ser	Asn	Arg	Val	Arg	Thr	Thr
	50					55				60					
Leu	Thr	Leu	Cys	Val	Glu	Ala	Ile	Asp	Phe	Asp	Ser	Gln	Ala	Cys	Gln

65					70					75					80
Leu	Arg	Val	Lys	Gly	Thr	Asn	Ile	Gln	Glu	Asn	Glu	Tyr	Val	Lys	Met
				85					90					95	
Gly	Ala	Tyr	His	Thr	Ile	Glu	Leu	Glu	Pro	Asn	Arg	Gln	Phe	Thr	Leu
				100				105					110		
Ala	Lys	Lys	Gln	Trp	Asp	Ser	Val	Val	Leu	Glu	Arg	Ile	Glu	Gln	Ala
		115					120					125			
Cys	Asp	Pro	Ala	Trp	Ser	Ala	Asp	Val	Ala	Ala	Val	Val	Met	Gln	Glu
	130					135					140				
Gly	Leu	Ala	His	Ile	Cys	Leu	Val	Thr	Pro	Ser	Met	Thr	Leu	Thr	Arg
145				150						155					160
Ala	Lys	Val	Glu	Val	Asn	Ile	Pro	Arg	Lys	Arg	Lys	Gly	Asn	Cys	Ser
				165				170					175		
Gln	His	Asp	Arg	Ala	Leu	Glu	Arg	Phe	Tyr	Glu	Gln	Val	Val	Gln	Ala
			180					185					190		
Ile	Gln	Arg	His	Ile	His	Phe	Asp	Val	Val	Lys	Cys	Ile	Leu	Val	Ala
	195					200						205			
Ser	Pro	Gly	Phe	Val	Arg	Glu	Gln	Phe	Cys	Asp	Tyr	Met	Phe	Gln	Gln
	210					215					220				
Ala	Val	Lys	Thr	Asp	Asn	Lys	Leu	Leu	Leu	Glu	Asn	Arg	Ser	Lys	Phe
225					230					235					240
Leu	Gln	Val	His	Ala	Ser	Ser	Gly	His	Lys	Tyr	Ser	Leu	Lys	Glu	Ala
				245				250					255		
Leu	Cys	Asp	Pro	Thr	Val	Ala	Ser	Arg	Leu	Ser	Asp	Thr	Lys	Ala	Ala
		260						265					270		
Gly	Glu	Val	Lys	Ala	Leu	Asp	Asp	Phe	Tyr	Lys	Met	Leu	Gln	His	Glu
	275					280						285			
Pro	Asp	Arg	Ala	Phe	Tyr	Gly	Leu	Lys	Gln	Val	Glu	Lys	Ala	Asn	Glu
	290					295					300				
Ala	Met	Ala	Ile	Asp	Thr	Leu	Leu	Ile	Ser	Asp	Glu	Leu	Phe	Arg	His
305					310					315					320
Gln	Asp	Val	Ala	Thr	Arg	Ser	Arg	Tyr	Val	Arg	Leu	Val	Asp	Ser	Val
				325					330				335		
Lys	Glu	Asn	Ala	Gly	Thr	Val	Arg	Ile	Phe	Ser	Ser	Leu	His	Val	Ser
		340						345					350		
Gly	Glu	Gln	Leu	Ser	Gln	Leu	Thr	Gly	Val	Ala	Ala	Ile	Leu	Arg	Phe
	355					360						365			
Pro	Val	Pro	Glu	Leu	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Ser	Glu	Glu
	370					375				380					

Asp  
385

&lt;210&gt; 3229

&lt;211&gt; 1008

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3229

nngcgcgcct cgcgctccag ggagccccgc cctccgcgag cacctccgca gcaaccgcag

60

cctgcactgg gcgcgcgaga gctgctaggg cggtttctct gctcggggcc tgttgggcag

120

ggcgcgctaa ggtgcgcgtg ctgcgtggtt ctaacccttc tgttgggcgt ttctgctgag

180



aggcgggagg cgctgagagt ctgtgcggag gtccgtggac agactgcttt gctcgttgtt  
 240  
 gctcttcgga ggccgcatc cccgaaggcg agctgaaata cggctgcagg ctacaatttg  
 300  
 cagccgacca ttatggaaga cggcaagcgg gagagggtggc ccaccctcat ggagcgcttg  
 360  
 tgctcggatg gcttcgcatt tccccaatc cccattaaac cgtatcatct gaagaggatc  
 420  
 cacagagctg tcttacgtgg taatctggag gaactgaagt accttctgct cacgtattat  
 480  
 gacatcaata agagagacag gaaggaaagg accgcctac atttggcctg tgccactggc  
 540  
 caaccgaaa tggtagatct cctggtgtcc agaagatgtg agcttaacct ctgcgaccgt  
 600  
 gaagacagga cacctctgat caaggctgta caactgaggc aggaggcttg tgcaactctt  
 660  
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 720  
 tacgtgtgtg ataatagaaga tacatccatg atagaaaaac ttctttcaca tggtagaaat  
 780  
 attgaagaat gcagcaagaa tgaatatcag ccaactgttac ttgctgtgag tcgaagaaaa  
 840  
 gtgaaaatgg tggaattttt attaaagaaa aaagcaaagt taaatgccat tgattatctt  
 900  
 ggcagatcag cctcatact tgctgttact cttggagaaa aagatatagt cattcttctt  
 960  
 ctgcagcaca atattgatgt gttttctcga gatgtgtatg gaaagctt  
 1008

&lt;210&gt; 3230

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3230

Met	Glu	Asp	Gly	Lys	Arg	Glu	Arg	Trp	Pro	Thr	Leu	Met	Glu	Arg	Leu
1				5				10					15		
Cys	Ser	Asp	Gly	Phe	Ala	Phe	Pro	Gln	Tyr	Pro	Ile	Lys	Pro	Tyr	His
			20					25					30		
Leu	Lys	Arg	Ile	His	Arg	Ala	Val	Leu	Arg	Gly	Asn	Leu	Glu	Glu	Leu
			35				40					45			
Lys	Tyr	Leu	Leu	Leu	Thr	Tyr	Tyr	Asp	Ile	Asn	Lys	Arg	Asp	Arg	Lys
	50				55					60					
Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met
65				70						75				80	
Val	His	Leu	Leu	Val	Ser	Arg	Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg
			85					90					95		
Glu	Asp	Arg	Thr	Pro	Leu	Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala
			100				105						110		
Cys	Ala	Thr	Leu	Leu	Leu	Gln	Asn	Gly	Ala	Asp	Pro	Asn	Ile	Thr	Asp
	115					120						125			
Val	Phe	Gly	Arg	Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr
	130					135					140				
Ser	Met	Ile	Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys

145                      150                      155                      160  
 Ser Lys Asn Glu Tyr Gln Pro Leu Leu Leu Ala Val Ser Arg Arg Lys  
                                  165                      170                      175  
 Val Lys Met Val Glu Phe Leu Leu Lys Lys Lys Ala Asn Val Asn Ala  
                                  180                      185                      190  
 Ile Asp Tyr Leu Gly Arg Ser Ala Leu Ile Leu Ala Val Thr Leu Gly  
                                  195                      200                      205  
 Glu Lys Asp Ile Val Ile Leu Leu Leu Gln His Asn Ile Asp Val Phe  
                                  210                      215                      220  
 Ser Arg Asp Val Tyr Gly Lys Leu  
 225                      230

<210> 3231

<211> 1367

<212> DNA

<213> Homo sapiens

<400> 3231

nnacgcgtga aggggaagtt tcgcctcaga aggcctgcctc gctgggtccga attcgggtggc  
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 gccacgtccg cccgtctccg ccttctgcat cgcggcttcg gcggcttcca cctagacacc  
 120  
 taacagtcgc ggagccggcc gcgtcgtgag ggggtcggca cggggagtcg ggcggtcttg  
 180  
 tgcacatttg ctacctgtgg gtcgaagatg tcggacatcg gagactggtt caggagcatc  
 240  
 ccggcgatca cgcgtattg gttcgccgcc accgtcgccg tgcccttggt cggcaaactc  
 300  
 ggctcatca gcccggccta cctcttctc tggccgaag ccttcttcta tcgctttcag  
 360  
 atttgaggc caatcactgc caccttttat ttccctgtgg gtccaggaac tggatttctt  
 420  
 tatttggca atttatattt cttatatcag tattctacgc gacttgaaac aggagctttt  
 480  
 gatgggaggc cagcagacta ttattcatg ctctcttcta actggatttg catcgtgatt  
 540  
 actggcttag caatggatat gcagttgctg atgattcttc tgatcatgac agtactttat  
 600  
 gtctggggcc agctgaacag agacatgatt gtatcatttt ggtttgaac acgatttaag  
 660  
 gcttgcattt taccctgggt tatecttgga ttcaactata tcatcggagg ctcggtaatc  
 720  
 aatgagctta ttggaaatct ggttgacat ctttattttt tctaagtgt cagataccca  
 780  
 atggacttgg gaggaagaaa tttctatcc acacctcagt ttttgtaccg ctggctgccc  
 840  
 agtaggagag gaggagtatc aggatttggt gtgccccctg ctagcatgag gcgagctgct  
 900  
 gatcagaatg gcggaggcgg gagacacaac tggggccagg gctttcgact tggagaccag  
 960  
 tgaaggggcg gcctcgggca gccgctctc tcaagccaca tttctctcca gtgctgggtg  
 1020  
 cacttaacaa ctgcgttctg gctaacactg ttggacctga cccacactga atgtagtctt  
 1080

tcagtagcag acaaagtctt ttaaattccc aagaaaaata taagtgttcc acaagtctca  
 1140  
 cgattctcat tcaagtcctt actgctgtga agaacaata ccaactgtgc aaattgcaaa  
 1200  
 actgactaca ttttttggtg tttttttttt tcccccttcc gttctgaata atgggtttta  
 1260  
 gcgggtccta gtctgctggc attgagctgg ggctgggtca ccaaaccctt cccaaaagga  
 1320  
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 1367

<210> 3232

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3232

Met	Ser	Asp	Ile	Gly	Asp	Trp	Phe	Arg	Ser	Ile	Pro	Ala	Ile	Thr	Arg
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Tyr	Trp	Phe	Ala	Ala	Thr	Val	Ala	Val	Pro	Leu	Val	Gly	Lys	Leu	Gly
		20						25					30		
Leu	Ile	Ser	Pro	Ala	Tyr	Leu	Phe	Leu	Trp	Pro	Glu	Ala	Phe	Leu	Tyr
		35					40					45			
Arg	Phe	Gln	Ile	Trp	Arg	Pro	Ile	Thr	Ala	Thr	Phe	Tyr	Phe	Pro	Val
	50					55				60					
Gly	Pro	Gly	Thr	Gly	Phe	Leu	Tyr	Leu	Val	Asn	Leu	Tyr	Phe	Leu	Tyr
65					70					75				80	
Gln	Tyr	Ser	Thr	Arg	Leu	Glu	Thr	Gly	Ala	Phe	Asp	Gly	Arg	Pro	Ala
			85						90				95		
Asp	Tyr	Leu	Phe	Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr
		100						105					110		
Gly	Leu	Ala	Met	Asp	Met	Gln	Leu	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser
	115						120					125			
Val	Leu	Tyr	Val	Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe
	130					135					140				
Trp	Phe	Gly	Thr	Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu
145					150					155				160	
Gly	Phe	Asn	Tyr	Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly
		165						170					175		
Asn	Leu	Val	Gly	His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met
		180						185					190		
Asp	Leu	Gly	Gly	Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg
	195						200				205				
Trp	Leu	Pro	Ser	Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro
	210					215					220				
Ala	Ser	Met	Arg	Arg	Ala	Ala	Asp	Gln	Asn	Gly	Gly	Gly	Gly	Arg	His
225					230					235				240	
Asn	Trp	Gly	Gln	Gly	Phe	Arg	Leu	Gly	Asp	Gln					
			245						250						

<210> 3233

<211> 975

<212> DNA

<213> Homo sapiens

&lt;400&gt; 3233

nacgcgtacg tgggtggagct ctgcgtgttt actatttttg gaaatgaaga aaatggaaag  
 60  
 accgttgttt accttgtggc tttccatctg ttctttgtta tgtttgtatg gtcctattgg  
 120  
 atgacaattt tcacatctcc cgcttcccc tccaaagagt tctactgtc caattctgaa  
 180  
 aaggaacgtt atgaaaaaga attcagccaa gaaagacaac aagaaatttt gagaagagca  
 240  
 gcaagagctt tacctatcta taccacatca gcttcaaaaa ctatcagata ttgtgaaaaa  
 300  
 tgtcagctga ttaaacctga tcgggcat cactgtcag cctgtgactc atgtattctt  
 360  
 aagatggatc atccctgtcc ttgggtgaat aactgtgtgg gattttctaa ttacaaattc  
 420  
 ttctgtctgt ttttattgta ttccctatta tattgccttt tcgtggccgc acagttttag  
 480  
 agtacttaaa aaatttttga cgaaagaacc gaccaaacc cgggccaaaa ttccacgtac  
 540  
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 600  
 cactgtctggc tttaaacagc attgtccaca gctccgtctg cagggtcagg gcatggctc  
 660  
 tctccgtgtt cctgtgaaga gccttcattg gaatcatccc gggacataca gcttgaatgt  
 720  
 gctgtctggc tagccctcc acaagtcggt cactctgcac aaggaatccg agagctcatc  
 780  
 aaggatcagc acggtctggg gccaggtgg ggtggaacac gcacgggtcca caagcaattc  
 840  
 tgtctttctc aaggcttttt cttgtgcagt atgaaatcct tcatatttca tatgaagtat  
 900  
 gtgccttctg gggcactgag ctcaggaact ccaaaaagac cccttcgggc cggatcccg  
 960  
 cttcaaggct gcccc  
 975

&lt;210&gt; 3234

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3234

Xaa Ala Tyr Val Val Glu Leu Cys Val Phe Thr Ile Phe Gly Asn Glu  
 1 5 10 15  
 Glu Asn Gly Lys Thr Val Val Tyr Leu Val Ala Phe His Leu Phe Phe  
 20 25 30  
 Val Met Phe Val Trp Ser Tyr Trp Met Thr Ile Phe Thr Ser Pro Ala  
 35 40 45  
 Ser Pro Ser Lys Glu Phe Tyr Leu Ser Asn Ser Glu Lys Glu Arg Tyr  
 50 55 60  
 Glu Lys Glu Phe Ser Gln Glu Arg Gln Gln Glu Ile Leu Arg Arg Ala  
 65 70 75 80  
 Ala Arg Ala Leu Pro Ile Tyr Thr Thr Ser Ala Ser Lys Thr Ile Arg

	85		90		95
Tyr Cys Glu Lys Cys Gln Leu Ile Lys Pro Asp Arg Ala His His Cys					
	100		105		110
Ser Ala Cys Asp Ser Cys Ile Leu Lys Met Asp His Pro Cys Pro Trp					
	115		120		125
Val Asn Asn Cys Val Gly Phe Ser Asn Tyr Lys Phe Phe Leu Leu Phe					
	130		135		140
Leu Leu Tyr Ser Leu Leu Tyr Cys Leu Phe Val Ala Ala Gln Phe					
145	150		155		

&lt;210&gt; 3235

&lt;211&gt; 551

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3235

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ntggaaactg agcttcaaac atataagcat tctcgtcagg ggctagatga aatgtacaat
60
gaagccagaa ggcagcttcg agatgaatct cagttacgac aggatgtaga gaatgagcta
120
gcagtacaag ttagtatgaa gcattgagatt gaacttgcca tgaagttgct ggagaaagat
180
atccatgaga aacaagatac tctgataggg cttcgacaac aactagagga agttaagca
240
attaacatag agatgtatca aaagttgcag ggttctgaag atggcttgaa agaaaaaat
300
gaaataattg cccgactaga agaaaaaacc aataaaatta ctgcagccat gaggcagctg
360
gaacaaagat tgcagcaagc agagaaggcg caaatggaag ctgaagatga ggatgagaaa
420
tatctacaag aatgtctcag taaatctgat agtctgcaga aacaaatctc ccaaaaggag
480
aaacagctgg tgcaactgga aactgacttg aagattgaga aggaatggag gcagactttg
540
caggaagatc t
551

```

&lt;210&gt; 3236

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3236

Xaa Glu Thr Glu Leu Gln Thr Tyr Lys His Ser Arg Gln Gly Leu Asp					
1	5		10		15
Glu Met Tyr Asn Glu Ala Arg Arg Gln Leu Arg Asp Glu Ser Gln Leu					
	20		25		30
Arg Gln Asp Val Glu Asn Glu Leu Ala Val Gln Val Ser Met Lys His					
	35		40		45
Glu Ile Glu Leu Ala Met Lys Leu Leu Glu Lys Asp Ile His Glu Lys					
	50		55		60
Gln Asp Thr Leu Ile Gly Leu Arg Gln Gln Leu Glu Glu Val Lys Ala					
65	70		75		80
Ile Asn Ile Glu Met Tyr Gln Lys Leu Gln Gly Ser Glu Asp Gly Leu					

85 90 95  
 Lys Glu Lys Asn Glu Ile Ile Ala Arg Leu Glu Glu Lys Thr Asn Lys  
 100 105 110  
 Ile Thr Ala Ala Met Arg Gln Leu Glu Gln Arg Leu Gln Gln Ala Glu  
 115 120 125  
 Lys Ala Gln Met Glu Ala Glu Asp Glu Asp Glu Lys Tyr Leu Gln Glu  
 130 135 140  
 Cys Leu Ser Lys Ser Asp Ser Leu Gln Lys Gln Ile Ser Gln Lys Glu  
 145 150 155 160  
 Lys Gln Leu Val Gln Leu Glu Thr Asp Leu Lys Ile Glu Lys Glu Trp  
 165 170 175  
 Arg Gln Thr Leu Gln Glu Asp  
 180

&lt;210&gt; 3237

&lt;211&gt; 1323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3237

nctctgggct gcgacctacc tcgcagaggg gtttgcacta aggcgctggg cgccgggctc  
 60  
 cgggcgctgt ggaccatggc tccgcccgcg gcgcctggcc gggaccgtgt gggccgtgag  
 120  
 gatgaggacc gttgggaagt acggggggac cgcaaggccc ggaagcccct ggtggagaag  
 180  
 aagcgacgcg cgcgatcaa cgagagtctt caggagttgc ggctgctgct ggcgggcgcc  
 240  
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 300  
 ggtgtgctgc ggggccgggc gcgcgagcgc gaggagctgc aggcggaagc gagcgagcgc  
 360  
 ttcgctgccg gctacatcca gtgcatgcac gaggtgcaca cgttcgtgtc cacgtgccag  
 420  
 gccatcgacg ctaccgtcgc tgccgagctc ctgaaccatc tgctcgagtc catgccgtg  
 480  
 cgtgagggca gcagcttcca ggaatctgctg ggggacgccc tggcggggcc acctagagcc  
 540  
 cctggacgga gtggtctggc tgccgggggc gctccgggat cccaataacc cagccccccg  
 600  
 ggtcctgggg acgacctgtg ctccgacctg gaggaggccc ctgaggctga actgagtcag  
 660  
 gctcctgctg aggggcccga cttggtgccc gcagccctgg gcagcctgac cacagcccaa  
 720  
 attgcccgga gtgtctggag gccttggtga ccaatgccag ccagagtcct gcgggggtgg  
 780  
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 840  
 cctggaagtc tcccagttct tccctccctc ctctgatgga tggtctgcag ggcagccct  
 900  
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 960  
 ctctggagtg ggtggaggga gggagctacg ggcaggagga agaattttgt agagctgcc  
 1020

gcgctctccc aggttcaccc acccaggctt caccagccct gtgcgggctc tgggggcaga  
 1080  
 ggtggcagaa atggtgctgg gcaactagtgt tccaggcagc cctgggctaa aaaaaagctt  
 1140  
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 1200  
 tgtgatgctc tgtacatctt gttttagca cacttgagtt tgtgtattcc attgacatca  
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 1320  
 acg  
 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

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			20						25				30		
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
		35					40				45				
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Lys	Arg	Arg	Ala
	50					55					60				
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Leu	Ala	Gly	Ala
65					70					75				80	
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
			85						90					95	
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Arg	Glu	Gln
			100						105					110	
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
	115						120					125			
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
	130						135				140				
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
145					150					155				160	
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
			165						170					175	
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
			180						185					190	
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
	195						200					205			
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
	210					215					220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
225					230					235				240	
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
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<210> 3239

<211> 432

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3239

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agaaacttgg tgagaaataa gctggcagtg attacgcgtc tccttcagaa tctgatcatg
120
ggtttgttcc tccttttctt cgttctgcgg gtccgaagca atgtgctaaa ggtgctatc
180
caggaccgcy taggtctcct ttaccagttt gtgggcgcca ccccgtaac aggcattgctg
240
aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc
300
ctctaccaga agtggcagat gatgctggcc tatgcactgc acgtctctcc cttcagcggt
360
gttgccacca tgattttcag cagtgtgtgc tactggacgc tgggcttaca tctgaggtt
420
gcccgattgg gt
432

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&lt;210&gt; 3240

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3240

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Lys Thr Lys Asp Ser Pro Gly Val Phe Ser Lys Leu Gly Val Leu Leu
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Arg Arg Val Thr Arg Asn Leu Val Arg Asn Lys Leu Ala Val Ile Thr
20     25     30
Arg Leu Leu Gln Asn Leu Ile Met Gly Leu Phe Leu Leu Phe Phe Val
35     40     45
Leu Arg Val Arg Ser Asn Val Leu Lys Gly Ala Ile Gln Asp Arg Val
50     55     60
Gly Leu Leu Tyr Gln Phe Val Gly Ala Thr Pro Tyr Thr Gly Met Leu
65     70     75     80
Asn Ala Val Asn Leu Phe Pro Val Leu Arg Ala Val Ser Asp Gln Glu
85     90     95
Ser Gln Asp Gly Leu Tyr Gln Lys Trp Gln Met Met Leu Ala Tyr Ala
100    105    110
Leu His Val Leu Pro Phe Ser Val Val Ala Thr Met Ile Phe Ser Ser
115    120    125
Val Cys Tyr Trp Thr Leu Gly Leu His Pro Glu Val Ala Arg Leu Gly
130    135    140

```

&lt;210&gt; 3241

&lt;211&gt; 492

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3241

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gtggaatttt tttagacaaa gtctcaaaaa acaacaaaac aaacaaaagg taagataaat
60

```



acgaaataca aaataagagg caggaagagc ccaaagcatc agaaatgtgc cagttataat  
 120  
 gggccaaaat cccctcttgt gtctccagaa gtatttgaaa aatacgttag gatctgcctc  
 180  
 acagacatgc tcccaggaca ctgcacagca aggaggtacg gcgggcccag ccagccaagg  
 240  
 cagaggagga catcactgcc acagcagggg gcctgactgg cagcaaaagg gacgactccg  
 300  
 gcgaaaagtc agcaggaaac aggacagggg ctggaccaat ggctccctc agccccacac  
 360  
 cccaccaggg caggagcggt gcctggcccc gggcaggcgg gtgggagagc tcaactgagt  
 420  
 ggagcaggg catggcccct gatgctgcag gtaccaggc tgcagctgca gaaacctcag  
 480  
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 492

<210> 3242

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3242

Met	Gly	Gln	Asn	Pro	Leu	Leu	Cys	Leu	Gln	Lys	Tyr	Leu	Lys	Asn	Thr
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Leu	Gly	Ser	Ala	Ser	Gln	Thr	Cys	Ser	Gln	Asp	Thr	Arg	Gln	Gln	Gly
		20						25				30			
Gly	Thr	Ala	Gly	Pro	Ala	Ser	Gln	Gly	Arg	Gly	Gly	His	His	Cys	His
		35					40					45			
Ser	Arg	Gly	Pro	Asp	Trp	Gln	Gln	Lys	Gly	Arg	Leu	Arg	Arg	Lys	Val
	50					55				60					
Ser	Arg	Lys	Gln	Asp	Arg	Gly	Trp	Thr	Asn	Gly	Leu	Pro	Gln	Pro	His
65					70				75					80	
Thr	Pro	Pro	Arg	Gln	Glu	Arg	Cys	Leu	Ala	Arg	Gly	Arg	Arg	Val	Gly
			85					90						95	
Glu	Leu	Thr	Glu	Trp	Ala	Ala	Gly	His	Gly	Pro					
			100				105								

<210> 3243

<211> 944

<212> DNA

<213> Homo sapiens

<400> 3243

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 120  
 tttagaggcaa aggtaaccca gaatctccca atgaaagaag gctgcacaga ggtctctctc  
 180  
 cttcgagttg ggtggtctgt tgatttttcc cgtccacagc ttggtgaaga tgaattctct  
 240  
 tacggtttgc atggacgagg actcaaggca gaaaatggac aatttgagga atttggccag  
 300

acttttgggg agaatgatgt tattggctgc ttgctaatt ttgagactga agaagtagaa  
 360  
 ctttccttct ccaagaatgg agaagaccta ggtgtggcat tctggatcag caaggattcc  
 420  
 ctggcagacc gggcccttct accccatgct ctctgcaaaa attgtgttgt agaattaaac  
 480  
 ttcggtcaga aggaggagcc cttcttccca ccaccagaag agtttgtgtt cattcatgct  
 540  
 gtgcctgttg aggagcgtgt acgcactgca gtccctccca agaccataga ggaatgtgag  
 600  
 gtgattctga tgggtgggact acccggatct ggaaagaccc agtgggcact gaaatatgca  
 660  
 aaagaaaacc ctgagaaaag atacaatgct ctgggagctg agactgtgct caatcaaagt  
 720  
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 780  
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 840  
 attcttgatc agtgtaatgt gtacaattct ggccaacggc ggaagctatt gctgttcaag  
 900  
 accttctctc ggaaagtggg ggtggtgtgc cctaagtagg aaga  
 944

&lt;210&gt; 3244

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3244

Asp	Leu	His	Phe	Gln	Val	Ser	Lys	Asp	Arg	Tyr	Gly	Gly	Gln	Pro	Leu
1				5				10					15		
Phe	Ser	Glu	Lys	Phe	Pro	Thr	Leu	Trp	Ser	Gly	Ala	Arg	Ser	Thr	Tyr
		20					25					30			
Gly	Val	Thr	Lys	Gly	Lys	Val	Cys	Phe	Glu	Ala	Lys	Val	Thr	Gln	Asn
	35					40					45				
Leu	Pro	Met	Lys	Glu	Gly	Cys	Thr	Glu	Val	Ser	Leu	Leu	Arg	Val	Gly
	50				55					60					
Trp	Ser	Val	Asp	Phe	Ser	Arg	Pro	Gln	Leu	Gly	Glu	Asp	Glu	Phe	Ser
65				70					75				80		
Tyr	Gly	Phe	Asp	Gly	Arg	Gly	Leu	Lys	Ala	Glu	Asn	Gly	Gln	Phe	Glu
		85				90					95				
Glu	Phe	Gly	Gln	Thr	Phe	Gly	Glu	Asn	Asp	Val	Ile	Gly	Cys	Phe	Ala
	100					105					110				
Asn	Phe	Glu	Thr	Glu	Glu	Val	Glu	Leu	Ser	Phe	Ser	Lys	Asn	Gly	Glu
	115					120					125				
Asp	Leu	Gly	Val	Ala	Phe	Trp	Ile	Ser	Lys	Asp	Ser	Leu	Ala	Asp	Arg
	130				135					140					
Ala	Leu	Leu	Pro	His	Val	Leu	Cys	Lys	Asn	Cys	Val	Val	Glu	Leu	Asn
145				150					155				160		
Phe	Gly	Gln	Lys	Glu	Glu	Pro	Phe	Phe	Pro	Pro	Pro	Glu	Glu	Phe	Val
		165				170						175			
Phe	Ile	His	Ala	Val	Pro	Val	Glu	Glu	Arg	Val	Arg	Thr	Ala	Val	Pro
		180				185						190			
Pro	Lys	Thr	Ile	Glu	Glu	Cys	Glu	Val	Ile	Leu	Met	Val	Gly	Leu	Pro

	195		200		205										
Gly	Ser	Gly	Lys	Thr	Gln	Trp	Ala	Leu	Lys	Tyr	Ala	Lys	Glu	Asn	Pro
	210					215					220				
Glu	Lys	Arg	Tyr	Asn	Val	Leu	Gly	Ala	Glu	Thr	Val	Leu	Asn	Gln	Met
	225					230					235				240
Arg	Met	Lys	Gly	Leu	Glu	Glu	Pro	Glu	Met	Asp	Pro	Lys	Ser	Arg	Asp
				245						250				255	
Leu	Leu	Val	Gln	Gln	Ala	Ser	Gln	Cys	Leu	Ser	Lys	Leu	Val	Gln	Ile
		260						265					270		
Ala	Ser	Arg	Thr	Lys	Arg	Asn	Phe	Ile	Leu	Asp	Gln	Cys	Asn	Val	Tyr
	275						280					285			
Asn	Ser	Gly	Gln	Arg	Arg	Lys	Leu	Leu	Leu	Phe	Lys	Thr	Phe	Ser	Arg
	290					295					300				
Lys	Val	Val	Val	Val	Val	Pro	Asn	Glu	Glu						
305					310										

&lt;210&gt; 3245

&lt;211&gt; 980

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3245

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 ctcagctgga tgaggatggg gatttggaag tggtgagaag accacgagcc gcctctgatt  
 120  
 ccaaccacgc agggcctctg agagacaagg tacatcccat gattctagca caggaagaag  
 180  
 acgacgtcct gggagaggaa gcacaaggca gccgcacga tatcatcaga ataggtgtgg  
 240  
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 300  
 acagcgctgg agctcggggc cggcacgggg ctcgctagca tcatcgagc caccatggca  
 360  
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 420  
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 600  
 gacttgactg atgctgtgtt taaaacgtc tcccgactcg cccacagatt gaaaaatgcc  
 660  
 tgcacagcca tactgtcggg ggagaagagg ctcaacttea cactgagaca cttggacgtc  
 720  
 acatgtgaag cctacgatca ctccgctcc tgctgcacg cgctggagca gctcacagat  
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 840  
 gagcgcctcc agcagctgga gctctggaag atcatcgag aaccagtaac atgacccatc  
 900  
 gcctccacca ggcgcggcgt ctcgactgtt cttagagtgt atttctagta aaatcagaag  
 960

ctcaccaaag caaaaaaaaaa  
980

<210> 3246

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3246

Val	Trp	Arg	Gly	Ala	Leu	Leu	Leu	Ala	Asp	Tyr	Ile	Leu	Phe	Arg	Gln
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Asp	Leu	Phe	Arg	Gly	Cys	Thr	Ala	Leu	Glu	Leu	Gly	Ala	Gly	Thr	Gly
			20					25					30		
Leu	Ala	Ser	Ile	Ile	Ala	Ala	Thr	Met	Ala	Arg	Thr	Val	Tyr	Cys	Thr
		35					40					45			
Asp	Val	Gly	Ala	Asp	Leu	Leu	Ser	Met	Cys	Gln	Arg	Asn	Ile	Ala	Leu
	50					55					60				
Asn	Ser	His	Leu	Ala	Ala	Thr	Gly	Gly	Gly	Ile	Val	Arg	Val	Lys	Glu
65					70				75					80	
Leu	Asp	Trp	Leu	Lys	Asp	Asp	Leu	Cys	Thr	Asp	Pro	Lys	Val	Pro	Phe
			85					90					95		
Ser	Trp	Ser	Gln	Glu	Glu	Ile	Ser	Asp	Leu	Tyr	Asp	His	Thr	Thr	Ile
			100					105					110		
Leu	Phe	Ala	Ala	Glu	Val	Phe	Tyr	Asp	Asp	Asp	Leu	Thr	Asp	Ala	Val
		115					120					125			
Phe	Lys	Thr	Leu	Ser	Arg	Leu	Ala	His	Arg	Leu	Lys	Asn	Ala	Cys	Thr
	130					135					140				
Ala	Ile	Leu	Ser	Val	Glu	Lys	Arg	Leu	Asn	Phe	Thr	Leu	Arg	His	Leu
145					150				155					160	
Asp	Val	Thr	Cys	Glu	Ala	Tyr	Asp	His	Phe	Arg	Ser	Cys	Leu	His	Ala
			165					170					175		
Leu	Glu	Gln	Leu	Thr	Asp	Gly	Lys	Leu	Arg	Phe	Val	Val	Glu	Pro	Val
		180					185					190			
Glu	Ala	Ser	Phe	Pro	Gln	Leu	Leu	Val	Tyr	Glu	Arg	Leu	Gln	Gln	Leu
	195					200						205			
Glu	Leu	Trp	Lys	Ile	Ile	Ala	Glu	Pro	Val	Thr					
	210					215									

<210> 3247

<211> 977

<212> DNA

<213> Homo sapiens

<400> 3247

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120  
aggttcaaca gcggcacgta taacaaccag tggatgatcg tggactacaa ggcgttcac  
180  
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240  
gtggtggtgg ctgacaagac ctgggagctc taccagaaga cctactgggc cagctacaac  
300

ataccgtcct tcgagactgt gttcaatgcc agtgggctgc aggcctagt ggcccagtat  
 360  
 ggggactggt tttcttatga cgggagcccc cgggcccaga tcttccggcg gaaccagtca  
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 720  
 agcggcctgc tgcacatggg ccagccagac ctctggaagt tcgcgcctgt caaggtttca  
 780  
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 840  
 acccccgctc caaggccacc ggacttctaa ctccagcccc tcttgggggc ttcgttctct  
 900  
 gatctggggg ctgagtcac tcctcctaga gtgggtcacg aacctgatgg ggctcagaac  
 960  
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 977

&lt;210&gt; 3248

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3248

Asn	Pro	Ala	Leu	Trp	Lys	Tyr	Val	Arg	Pro	Arg	Gly	Cys	Val	Leu	Glu
1				5					10					15	
Trp	Val	Arg	Asn	Ile	Val	Ala	Asn	Arg	Leu	Ala	Ser	Asp	Gly	Ala	Thr
		20						25					30		
Trp	Ala	Asp	Ile	Phe	Lys	Arg	Phe	Asn	Ser	Gly	Thr	Tyr	Asn	Asn	Gln
		35					40					45			
Trp	Met	Ile	Val	Asp	Tyr	Lys	Ala	Phe	Ile	Pro	Gly	Gly	Pro	Ser	Pro
	50					55					60				
Gly	Ser	Arg	Val	Leu	Thr	Ile	Leu	Glu	Gln	Ile	Pro	Gly	Met	Val	Val
65					70					75				80	
Val	Ala	Asp	Lys	Thr	Ser	Glu	Leu	Tyr	Gln	Lys	Thr	Tyr	Trp	Ala	Ser
			85						90					95	
Tyr	Asn	Ile	Pro	Ser	Phe	Glu	Thr	Val	Phe	Asn	Ala	Ser	Gly	Leu	Gln
			100						105					110	
Ala	Leu	Val	Ala	Gln	Tyr	Gly	Asp	Trp	Phe	Ser	Tyr	Asp	Gly	Ser	Pro
		115					120					125			
Arg	Ala	Gln	Ile	Phe	Arg	Arg	Asn	Gln	Ser	Leu	Val	Gln	Asp	Met	Asp
	130						135					140			
Ser	Met	Val	Arg	Leu	Met	Arg	Tyr	Asn	Asp	Phe	Leu	His	Asp	Pro	Leu
145					150					155				160	
Ser	Leu	Cys	Lys	Ala	Cys	Asn	Pro	Gln	Pro	Asn	Gly	Glu	Asn	Ala	Ile
			165						170					175	
Ser	Ala	Arg	Ser	Asp	Leu	Asn	Pro	Ala	Asn	Gly	Ser	Tyr	Pro	Phe	Gln

	180		185		190										
Ala	Leu	Arg	Gln	Arg	Ser	His	Gly	Gly	Ile	Asp	Val	Lys	Val	Thr	Ser
	195						200					205			
Met	Ser	Leu	Ala	Arg	Ile	Leu	Ser	Leu	Leu	Ala	Ala	Ser	Gly	Pro	Thr
	210						215					220			
Trp	Asp	Gln	Val	Pro	Pro	Phe	Gln	Trp	Ser	Thr	Ser	Pro	Phe	Ser	Gly
	225						230					235			240
Leu	Leu	His	Met	Gly	Gln	Pro	Asp	Leu	Trp	Lys	Phe	Ala	Pro	Val	Lys
							245								255
Val	Ser	Trp	Asp												
							260								

&lt;210&gt; 3249

&lt;211&gt; 4487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3249

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60
taatcagcag atggcagcac tggtaactga acccaggctt gtgtgaaccg cccacccct
120
gctcttcact tttatgcttt ccaccagagt aataatggaa atcctggaaa gccttctcct
180
ttcccatggg ttcccaactga ttgcttttct ctctctctct cccaccccca ctccagggtg
240
tctggggcca ggtgccaccg gccattgtcc aggcagctgt gtgcaagcca aagaagcatg
300
tggacactgg aagactcctc ggggacagtc ctgcaccgcc tcatccagga gcagctgcgc
360
tacggcaacc tgactgagac gcgcacgctg ctagccatcc agcagcaggc cctgaggggt
420
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480
gacagtcagg tgctgcagca ggccaccagg caggagcccc agggccagga gcaccagggc
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<211> 849

<212> PRT

<213> Homo sapiens

<400> 3250

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Ser Leu Leu Gly Cys Ser Ser Ser Gln Arg Ala Ala Ser Leu Asp Ser		
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&lt;210&gt; 3251

&lt;211&gt; 2595

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3251

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 <212> PRT  
 <213> Homo sapiens

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&lt;210&gt; 3254

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3254

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			20					25					30		
Tyr	Ser	Arg	Val	Thr	Pro	Gln	Glu	Gln	Ala	Lys	Leu	Asp	Ala	Gln	Leu
			35				40					45			
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Glu	Asp	Glu	Arg	Lys	Phe	Thr	Ser	Thr	Cys	His	Phe	Thr	Tyr	Pro	Ala
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3255

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&lt;210&gt; 3256

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3256

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Tyr	Val	Arg	Asn	Lys	Lys	His	Gly	Gln	Gly	Thr	Phe	Ile	Tyr	Pro	Asp
			85				90						95		
Gly	Ser	Arg	Tyr	Glu	Gly	Glu	Trp	Ala	Asn	Asp	Leu	Arg	His	Gly	His
		100					105					110			
Gly	Val	Tyr	Tyr	Tyr	Ile	Asn	Asn	Asp	Thr	Tyr	Thr	Gly	Glu	Trp	Phe
	115					120						125			
Ala	His	Gln	Arg	His	Gly	Gln	Gly	Thr	Tyr	Leu	Tyr	Ala	Glu	Thr	Gly
	130				135					140					
Ser	Lys	Tyr	Val	Gly	Thr	Trp	Val	Asn	Gly	Gln	Gln	Glu	Gly	Thr	Ala
145					150				155					160	
Glu	Leu	Ile	His	Leu	Asn	His	Arg	Tyr							

165

&lt;210&gt; 3257

&lt;211&gt; 368

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3257

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tggcgcgc
368

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&lt;210&gt; 3258

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3258

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Xaa Pro Gly Tyr Ile Asp Ser Pro Thr Tyr Ser Arg Gln Gly Met Ser
1           5           10          15
Pro Thr Phe Ser Arg Ser Pro His His Tyr Tyr Arg Ser Gly Asp Leu
20          25          30
Ser Thr Ala Thr Lys Ser Glu Thr Ser Glu Asp Ile Ser Gln Thr Ser
35          40          45
Lys Tyr Ser Pro Ile Tyr Ser Pro Asp Pro Tyr Tyr Ala Ser Glu Ser
50          55          60
Glu Tyr Trp Thr Tyr His Gly Ser Pro Lys Val Pro Arg Ala Arg Arg
65          70          75          80
Phe Ser Ser Gly Gly Glu Glu Asp Asp Phe Asp Arg Ser Met His Lys
85          90          95
Leu Gln Ser Gly Ile Gly Arg Leu Ile Leu Lys Glu Glu Met Lys Ala
100         105         110
Arg Ser Ser Ser Tyr Ala Asp Pro Trp Arg
115         120

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&lt;210&gt; 3259

&lt;211&gt; 747

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3259

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acgcgtgaag ggcgcacct ctgctgcagc actggccacc ccggacacgc tgcagggccca
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 120  
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 240  
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 720  
 cactacaaga tccgccagaa ctccagc  
 747

&lt;210&gt; 3260

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3260

Met	Ser	Ser	Leu	Gly	Phe	Thr	Ser	Lys	Glu	Gln	Arg	Asn	Leu	Gly	Leu
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Leu	Val	His	Leu	Met	Thr	Ser	Asn	Pro	Lys	Ile	Leu	Tyr	Ala	Pro	Ala
		20						25					30		
Gly	Ser	Glu	Val	Asp	Arg	Val	Ile	Leu	Lys	Ala	Asn	Glu	Thr	Phe	Ala
	35					40					45				
Phe	Val	Gly	Asn	Val	Thr	His	Tyr	Ala	Gln	Val	Trp	Leu	Asn	Ile	Ser
	50				55					60					
Ala	Glu	Ile	Arg	Ser	Phe	Leu	Glu	Gln	Gly	Arg	Leu	Gln	Gln	His	Leu
65				70				75						80	
Arg	Trp	Leu	Gln	Gln	Tyr	Val	Ala	Glu	Leu	Arg	Leu	His	Pro	Glu	Ala
			85					90					95		
Leu	Asn	Leu	Ser	Leu	Asp	Glu	Leu	Pro	Pro	Ala	Leu	Arg	Gln	Asp	Asn
		100						105					110		
Phe	Ser	Leu	Pro	Ser	Gly	Met	Ala	Leu	Leu	Gln	Gln	Leu	Asp	Thr	Ile
		115				120					125				
Asp	Asn	Ala	Ala	Cys	Gly	Trp	Ile	Gln	Phe	Met	Ser	Lys	Val	Ser	Val
	130				135					140					
Asp	Ile	Phe	Lys	Gly	Phe	Pro	Asp	Glu	Glu	Ser	Ile	Val	Asn	Tyr	Thr
145				150					155					160	
Leu	Asn	Gln	Ala	Tyr	Gln	Asp	Asn	Val	Thr	Val	Phe	Ala	Ser	Val	Ile
			165					170					175		
Phe	Gln	Thr	Arg	Lys	Asp	Gly	Ser	Ser	Arg	Leu	Thr	Cys	Thr	Thr	Arg

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Ser Ala Arg Thr Pro  
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185

190

<210> 3261  
<211> 1323  
<212> DNA  
<213> Homo sapiens

<400> 3261  
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180  
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240  
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300  
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360  
gagtttgata aattccttga agaaagagcc aaagctgctg aaatggttcc cgacctcccc  
420  
tcgcccccca tggaggctcc tgcctcagcc tcaaaccctt ctggccggaa gaagccagag  
480  
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540  
gggtccccgc ttgcaccccg tggacaccgg gcaactggca ctctacatc cccagctcca  
600  
cacggcctgc acacctgtgt ttccatggaa atgccaccgt gtctgtctcc aggcctcccc  
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720  
gactctctcc cctcccacca tgggccccctc tgcccatgtt tctcccagg aagagcgggc  
780  
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840  
cccgcccatg gagaaagagc acgcgccggc ccgcctgtg ctcacctctg cctggctcag  
900  
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960  
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1080  
tctctacct tcttgacct ctctccatca ttcagctgcc agcccaggct tcacacccaa  
1140  
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1200  
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1320

aaa  
1323

<210> 3262  
<211> 81  
<212> PRT  
<213> Homo sapiens

<400> 3262  
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1 5 10 15  
Arg Thr Asp Leu Lys Gly Asp Asp Leu Glu Glu Gly Val Thr Ser Glu  
20 25 30  
Glu Phe Asp Lys Phe Leu Glu Glu Arg Ala Lys Ala Ala Glu Met Val  
35 40 45  
Pro Asp Leu Pro Ser Pro Pro Met Glu Ala Pro Ala Pro Ala Ser Asn  
50 55 60  
Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala  
65 70 75 80  
Leu

<210> 3263  
<211> 1128  
<212> DNA  
<213> Homo sapiens

<400> 3263  
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120  
gagctggaga gagaggccaa gaaatcagcg aagaagccgc agtcctcaag cacagagccc  
180  
gccaggaaac ctggccagaa ggagaagaga gtgcggcccc aggagaagca acaagccaag  
240  
cccgtgaagg tggagcggac ccggaagcgg tccgagggt tctcgatgga caggaaggta  
300  
gagaagaaga aagagccctc cgtggaggag aagctgcaga agctgcacag tgagatcaag  
360  
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420  
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600  
gctgggatgg agaaggagaa ggccgaggag aagctggccg gggaggagct ggccggggag  
660  
gaggcccccc aggagaagc ggaggacaag cccagcaccg atctctcagc cccagtgaat  
720  
ggcgaggcca catcacagaa gggggagagc gcagaggaca aggagcacga ggagggtcgg  
780

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900  
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960  
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1080  
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<210> 3264

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3264

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Pro	Val	Lys	Lys	Arg	Gly	Arg	Lys	Gly	Arg	Gly	Arg	Gly	Pro	Pro	Ser
		20						25					30		
Ser	Ser	Asp	Ser	Glu	Pro	Glu	Ala	Glu	Leu	Glu	Arg	Glu	Ala	Lys	Lys
		35					40					45			
Ser	Ala	Lys	Lys	Pro	Gln	Ser	Ser	Ser	Thr	Glu	Pro	Ala	Arg	Lys	Pro
	50				55						60				
Gly	Gln	Lys	Glu	Lys	Arg	Val	Arg	Pro	Glu	Glu	Lys	Gln	Gln	Ala	Lys
65				70					75					80	
Pro	Val	Lys	Val	Glu	Arg	Thr	Arg	Lys	Arg	Ser	Glu	Gly	Phe	Ser	Met
			85					90						95	
Asp	Arg	Lys	Val	Glu	Lys	Lys	Lys	Glu	Pro	Ser	Val	Glu	Glu	Lys	Leu
			100					105					110		
Gln	Lys	Leu	His	Ser	Glu	Ile	Lys	Phe	Ala	Leu	Lys	Val	Asp	Ser	Pro
		115					120					125			
Asp	Val	Lys	Gly	Cys	Leu	Asn	Ala	Leu	Glu	Glu	Leu	Gly	Thr	Leu	Gln
	130				135						140				
Val	Thr	Ser	Gln	Ile	Leu	Gln	Lys	Asn	Thr	Asp	Val	Val	Ala	Thr	Leu
145				150					155					160	
Lys	Lys	Ile	Arg	Arg	Tyr	Lys	Ala	Asn	Lys	Asp	Val	Met	Glu	Lys	Ala
			165					170					175		
Ala	Glu	Val	Tyr	Thr	Arg	Leu	Lys	Ser	Arg	Val	Leu	Gly	Pro	Lys	Ile
		180						185					190		
Glu	Ala	Val	Gln	Lys	Val	Asn	Lys	Ala	Gly	Met	Glu	Lys	Glu	Lys	Ala
	195					200					205				
Glu	Glu	Lys	Leu	Ala	Gly	Glu	Glu	Leu	Ala	Gly	Glu	Glu	Ala	Pro	Gln
	210				215						220				
Glu	Lys	Ala	Glu	Asp	Lys	Pro	Ser	Thr	Asp	Leu	Ser	Ala	Pro	Val	Asn
225				230					235					240	
Gly	Glu	Ala	Thr	Ser	Gln	Lys	Gly	Glu	Ser	Ala	Glu	Asp	Lys	Glu	His
			245					250					255		
Glu	Glu	Gly	Arg	Asp	Ser	Glu	Glu	Gly	Pro	Arg	Cys	Gly	Ser	Ser	Glu
			260					265					270		
Asp	Leu	His	Asp	Ser	Val	Arg	Glu	Gly	Pro	Asp	Leu	Asp	Arg	Pro	Gly

275                      280                      285  
 Ser Asp Arg Gln Glu Arg Glu Arg Ala Arg Gly Asp Ser Glu Ala Leu  
 290                      295                      300  
 Asp Glu Glu Ser  
 305

<210> 3265  
 <211> 524  
 <212> DNA  
 <213> Homo sapiens

<400> 3265  
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 ctttttcgtg gttttcaaaa tgtttccatt gagggcgtat tacttttata atcaacaaaa  
 120  
 gagaaagtat aacttcattt tagaaattct cacctaaggc atttgaaaaa taatccaaaa  
 180  
 ggtacattat tgttgatttt tcttccttct agaaaggatc ttgttcgagt agaagccaca  
 240  
 gtcattgaaa agacagaatc atggccaaga atcattatga gattcaggaa aaggaaaaac  
 300  
 ttcaagaaga aaagaagtaa gttagagaaa gtaccgctgg gccctgttgc acggtgctgg  
 360  
 ttgcccaggc gcatgcggac ggaggggtgtg gggcacgtgg gtctcgggac aggaagccca  
 420  
 ggcaggtctc aacctggctg ccaactgccc cttgccaccc tcctcctaga gggagcacc  
 480  
 agaggggtcca gcctcgtccc ccttctctc cagctccac gcgt  
 524

<210> 3266  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 3266  
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 1                      5                      10                      15  
 Glu Lys Val Pro Leu Gly Pro Val Ala Arg Cys Trp Leu Pro Arg Arg  
 20                      25                      30  
 Met Arg Thr Glu Gly Val Gly His Val Gly Leu Gly Thr Gly Ser Pro  
 35                      40                      45  
 Gly Arg Ser Gln Pro Gly Cys His Cys Pro Leu Ala Thr Leu Ile Leu  
 50                      55                      60  
 Glu Gly Ala Pro Arg Gly Ser Ser Leu Ala Pro Leu Leu Leu His Ala  
 65                      70                      75                      80  
 Pro Arg

<210> 3267  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 3267

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 120  
 cattgtggga agtttcaaga tgccttggag ccattgctca gctgggttggc agataccgag  
 180  
 gagctcatag ccaatcagaa acctccatct gctgagtata aagtgggtgaa agcacagatc  
 240  
 caagaacaga agttgctcca gcggctccta gatgatcgaa aggccacagt agacatgctt  
 300  
 caagcagaag gaggcagaat agcccagtca gcagagctgg ctgatagaga gaaaatcact  
 360  
 ggacagctgg agagtcttga aagtagatgg act  
 393

&lt;210&gt; 3268

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3268

Val	Glu	Tyr	Ala	Cys	Arg	Val	Gln	Gly	Leu	Glu	His	Asp	Met	Glu	Glu
1				5				10					15		
Ile	Asn	Ala	Arg	Trp	Asn	Thr	Leu	Asn	Lys	Lys	Val	Ala	Gln	Arg	Ile
		20					25					30			
Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu	His	Cys	Gly	Lys	Phe	Gln	Asp	Ala
	35					40					45				
Leu	Glu	Pro	Leu	Leu	Ser	Trp	Leu	Ala	Asp	Thr	Glu	Glu	Leu	Ile	Ala
	50				55				60						
Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu	Tyr	Lys	Val	Val	Lys	Ala	Gln	Ile
65				70				75				80			
Gln	Glu	Gln	Lys	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Asp	Arg	Lys	Ala	Thr
			85				90					95			
Val	Asp	Met	Leu	Gln	Ala	Glu	Gly	Gly	Arg	Ile	Ala	Gln	Ser	Ala	Glu
		100					105					110			
Leu	Ala	Asp	Arg	Glu	Lys	Ile	Thr	Gly	Gln	Leu	Glu	Ser	Leu	Glu	Ser
		115				120						125			
Arg	Trp	Thr													
		130													

&lt;210&gt; 3269

&lt;211&gt; 1423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3269

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 tttgaagctg taactttatg agcgattatt tactaccttt gagaaatgtg ttttagtata  
 120  
 aaatatagga tgtggaagcg aaaaaaatatc tgggtagcaa gtgaggtgta ctcaaaaata  
 180

agcaaaagtc acgtgggtct gattttatac cctcgctgga aagcttggtc tcagacacac  
 240  
 tgttactgca agtgtgtgtg agggggaaac tctcacacac tttgcagttg aggacagggc  
 300  
 tagactttga ggtggaccct ggctcccagg gctgtgtact cccagcccgt gtttctcttt  
 360  
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 420  
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 720  
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 780  
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 840  
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 900  
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 960  
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 1020  
 ctttttctgg agtgggtttt atttttgttt tgtttcgttt tctccttaat agaaaaatgt  
 1080  
 taacttactg ggaatagcta ctcagccttg gaaatggaga gcactgcagt gaattcttta  
 1140  
 gggcactttt gtggccggat gcttccaact ttgtcagtct tttctgcctc aacttcttcc  
 1200  
 agacatcagt caccatgaga ctgttttact ttcaggcgta ttgggggggtt tgatttactt  
 1260  
 tccttttatt tctttatttt ttgcttatac ttgtttttga aaacctctc tgagtttgaa  
 1320  
 gggacagcta tttttattga ttatctttaa gtctctctac catggagaag agcaggaagg  
 1380  
 gatacactct ccagtgcatt ttcatgtttt gaatcggatt agt  
 1423

&lt;210&gt; 3270

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3270

Met Ile Glu Asn Glu Met Leu Thr Met Glu Leu Asn Gly Asp Ser Met  
 1 5 10 15  
 Glu Val Lys Pro Ile Met Thr Arg Lys Leu Arg Arg Arg Pro Asn Asp  
 20 25 30  
 Pro Val Pro Ile Pro Asp Lys Arg Arg Lys Pro Ala Pro Ala Gln Leu

35	40	45
Asn Tyr Leu Leu Thr Asp Glu Gln Ile Met Glu Asp Leu Arg Thr Leu		
50	55	60
Asn Lys Leu Lys Ser Pro Lys Arg Pro Ala Ser Pro Ser Ser Pro Glu		
65	70	75
His Leu Pro Ala Thr Pro Ala Glu Ser Pro Ala Gln Arg Phe Glu Ala		
85	90	95
Arg Ile Glu Asp Gly Lys Leu Tyr Tyr Asp Lys Arg Trp Tyr His Lys		
100	105	110
Ser Gln Ala Ile Tyr Leu Glu Ser Lys Asp Asn Gln Lys Leu Ser Cys		
115	120	125
Val Ile Ser Ser Val Gly Ala Asn Glu Ile Trp Val Arg Lys Thr Ser		
130	135	140
Asp Ser Thr Lys Met Arg Ile Tyr Leu Gly Gln Leu Gln Arg Gly Leu		
145	150	155
Phe Val Ile Arg Arg Arg Ser Ala Ala		160
165		

&lt;210&gt; 3271

&lt;211&gt; 464

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3271

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gaaggcactg gggatacagc cgagcacaag atggacagag atccctggcc cctcggagca  
120  
ggcagtctgt ggctctggcc cctccagttc cttgtcacca ggagataggc aatgcagctg  
180  
atgagaaggg ccccggcagc aagagatcca atgatggtgg ccgccaggat cccagcgttg  
240  
gtgggcaggt gtgtactggg cagctcctta ttcttttcag ctacctggac ctcagtcttg  
300  
gccttcatag tccattcaga gttgatggta atggctactt ggtaggtgcc actgtctgta  
360  
ggctggggcgc ggcgagcag catggaacca ttggggaagc ccacgatgtc tcgctgtccc  
420  
atggcactgc catccctctg aggcgttgt atccccaggg atgt  
464

&lt;210&gt; 3272

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3272

Met Gly Gln Arg Asp Ile Val Gly Phe Pro Asn Gly Ser Met Leu Leu
1 5 10 15
Arg Arg Ala Gln Pro Thr Asp Ser Gly Thr Tyr Gln Val Ala Ile Thr
20 25 30
Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
35 40 45
Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly



50		55		60
Ile Leu Ala Ala Thr	Ile Ile Gly Ser Leu Ala Ala Gly Ala Leu Leu			
65	70	75	80	
Ile Ser Cys Ile Ala Tyr Leu Leu Val Thr Arg Asn Trp Arg Gly Gln				
	85	90	95	
Ser His Arg Leu Pro Ala Pro Arg Gly Gln Gly Ser Leu Ser Ile Leu				
	100	105	110	
Cys Ser Ala Val Ser Pro Val Pro Ser Val Thr Pro Ser Thr Trp Met				
	115	120	125	
Ala Thr Thr Glu Lys Pro Glu Leu Gly Pro Ala His				
	130	135	140	

&lt;210&gt; 3273

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3273

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300
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387

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&lt;210&gt; 3274

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3274

Xaa Ala Pro Gly Met Glu Asn Phe Ile Leu Tyr Glu Glu Ile Gly Arg		
1	5	10
Gly Ser Lys Thr Val Val Tyr Lys Gly Arg Arg Lys Gly Thr Ile Asn		
	20	25
Phe Val Ala Ile Leu Cys Thr Asp Lys Cys Arg Arg Pro Glu Ile Thr		
	35	40
Asn Trp Val Arg Leu Thr Arg Glu Ile Lys His Lys Asn Ile Val Thr		
	50	55
Phe His Glu Trp Tyr Glu Thr Ser Asn His Leu Trp Leu Val Val Glu		
65	70	75
Leu Arg Thr Gly Gly Ser Leu Lys Thr Val Ile Ala Gln Asp Glu Asn		
	85	90
Leu Pro Glu Asp Val Val Arg Glu Phe Gly Ile Asp Leu Ile Ser Gly		
	100	105
Leu His His Leu His Lys Leu Gly Ile Leu Phe Val Thr Phe Leu Leu		

115 120 125  
Gly

<210> 3275  
<211> 1266  
<212> DNA  
<213> Homo sapiens

<400> 3275  
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120  
ttttctttta tagagacatg aataacagat acactgaagt ataaacaaaa attggcctga  
180  
agcgtccggg ggcgggctta gtaggagct atggctaaac atcatcctga ttgatcttt  
240  
tgccgcaagc aggctgggtg tgccatcgga agactgtgtg aaaaatgtga tggcaagtgt  
300  
gtgatttgtg actctatgt gcgtccctgc actctgggtg gcatatgtga tgagtgtaac  
360  
tatggatctt accaggggag ctgtgtgatc tgtggaggac ctgggggtctc tgatgcctat  
420  
tattgtaagg agtgcacat ccaggagaag gacagagatg gctgccccaa gattgtcaat  
480  
ctggggagct ctaagacaga cctcttctat gaacgcaaaa aatacggctt caagaagagg  
540  
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600  
tgctactac taccagcaga aaggagcag agcccagagc atcaccagga gtgcctgcta  
660  
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720  
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840  
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900  
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1260  
aaaaaa  
1266

<210> 3276  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 3276  
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 Cys Asp Ser Tyr Val Arg Pro Cys Thr Leu Val Arg Ile Cys Asp Glu  
 35 40 45  
 Cys Asn Tyr Gly Ser Tyr Gln Gly Arg Cys Val Ile Cys Gly Gly Pro  
 50 55 60  
 Gly Val Ser Asp Ala Tyr Tyr Cys Lys Glu Cys Thr Ile Gln Glu Lys  
 65 70 75 80  
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 85 90 95  
 Asp Leu Phe Tyr Glu Arg Lys Lys Tyr Gly Phe Lys Lys Arg  
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 180  
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 240  
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120
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 240  
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&lt;210&gt; 3280

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3280

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Gly	Arg	Ser	Thr	Pro	Ser	Ser	Ser	Ser	Ser	Leu	Arg	Lys	Arg	Leu	Gln
			20					25					30		
Leu	Leu	Pro	Pro	Ser	Arg	Pro	Pro	Pro	Glu	Pro	Glu	Pro	Gly	Thr	Met
			35				40					45			
Val	Glu	Lys	Gly	Ser	Asp	Ser	Ser	Ser	Glu	Lys	Gly	Gly	Val	Pro	Gly
			50			55			60						
Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser	Arg	Asn	Phe	Ile	Arg	Asn	Ser
65					70				75					80	
Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met	Leu	Ser	Pro	Thr	Tyr	Lys	Gln
			85					90						95	
Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe	Ser	Lys	Leu	Pro	Glu	Ala	Glu

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      100      105      110
Arg Leu Ile Val Asp Tyr Ser Cys Ala Leu Gln Arg Glu Ile Leu Leu
      115      120      125
Gln Gly Arg Leu Tyr Leu Ser Glu Asn Trp Ile Cys Phe Tyr Ser Asn
      130      135      140
Ile Phe Arg Trp Glu Thr Thr Ile Ser Ile Gln Leu Lys Glu Val Thr
      145      150      155      160
Cys Leu Lys Lys Glu Lys Thr Ala Lys Leu Ile Pro Asn Ala Ile Gln
      165      170      175
Ile Cys Thr Glu Ser Glu Lys His Phe Phe Thr Ser Phe Gly Ala Arg
      180      185      190
Asp Arg Cys Phe Leu Leu Ile Phe Arg Leu Trp Gln Asn Ala Leu Leu
      195      200      205
Glu Lys Thr Leu Ser Pro Arg Glu Leu Trp His Leu Val His Gln Cys
      210      215      220
Tyr Gly Ser Glu Leu Gly Leu Thr Ser Glu Asp Glu Asp Tyr Val Ser
      225      230      235      240
Pro Leu Gln Leu Asn Gly Leu Gly Thr Pro Lys Glu Val Gly Asp Val
      245      250      255
Ile Ala Leu Ser Asp Ile Thr Ser Ser Gly Ala Ala Asp Arg Ser Gln
      260      265      270
Glu Pro Ser Pro Val Gly Ser Arg Arg Gly His Val Thr Pro Asn Leu
      275      280      285
Ser Arg Ala Ser Ser Asp Ala Asp His Gly Ala Glu Glu Asp Lys Glu
      290      295      300
Glu Gln Val Asp Ser Gln Pro Asp Ala Ser Ser Ser Gln Thr Val Thr
      305      310      315      320
Pro Val Ala Glu Pro Pro Ser Thr Glu Pro Thr Gln Pro Asp Gly Pro
      325      330      335
Thr Thr Leu Gly Pro Leu Asp Leu Leu Pro Ser Glu Glu Leu Leu Thr
      340      345      350
Asp Thr Ser Asn Ser Ser Ser Ser Thr Gly Glu Glu Ala Asp Leu Ala
      355      360      365
Ala Leu Leu Pro Asp Leu Ser Gly
      370      375

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&lt;210&gt; 3281

&lt;211&gt; 842

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3281

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360

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 842

<210> 3282

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3282

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Pro	Asp	Thr	Ser	Leu	Gln	Val	Leu	Leu	Val	Ala	Gly	Pro	Thr	Lys	Ala
			20					25					30		
Pro	Trp	Pro	Arg	Gln	Pro	Gly	Gly	Cys	Trp	Thr	Val	Gly	Leu	Pro	Ala
		35				40					45				
Thr	Ser	Phe	Ala	Arg	Gly	Lys	Glu	His	His	Val	Gly	His	Ile	His	Glu
	50				55					60					
Gly	Thr	Gly	Asn	Ser	Val	Val	Pro	Ser	Val	Thr	Pro	Cys	Gln	Asp	Thr
65				70					75					80	
Gln	Asp	Glu	Asn	Pro	Ala	Pro	Glu	Arg	Ala	Ala	Gly	Ile	Ser	Ser	Thr
			85					90					95		
His	Thr	Gln	Ala	Leu	Cys	Pro	Gln	Ala	Pro	Pro	Ser	Val	Leu	Pro	Gly
		100					105						110		
Asn	Asn	Thr	Leu	Cys	Glu	Pro	Val	Val	Glu	Pro	Gly	Thr	Ala	Trp	Ala
	115					120					125				
Ser	Glu	Gln	Ser	His	Glu	Ile	Arg	Val	Arg	Thr	Pro	Ser	Cys	Arg	Gly
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Arg	Asp														
145															

<210> 3283

<211> 3268

<212> DNA

<213> Homo sapiens

<400> 3283

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<210> 3284  
 <211> 1012  
 <212> PRT  
 <213> Homo sapiens

<400> 3284

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		20						25					30		
Ala	Phe	Thr	Arg	Xaa	His	Val	Cys	Ala	Glu	Asn	Leu	Pro	Pro	Val	Leu
	35					40					45				
Met	Glu	His	Lys	Ala	Thr	Thr	Ile	Gln	Lys	His	Val	Arg	Gly	Trp	Met
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Ala	Arg	Arg	His	Phe	Gln	Arg	Leu	Arg	Asp	Ala	Ala	Ile	Val	Ile	Gln
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Cys	Ala	Phe	Arg	Met	Leu	Lys	Ala	Arg	Arg	Glu	Leu	Lys	Ala	Leu	Arg
			85					90					95		
Ile	Glu	Ala	Arg	Ser	Ala	Glu	His	Leu	Lys	Arg	Leu	Asn	Val	Gly	Met
		100						105					110		
Glu	Asn	Lys	Val	Val	Gln	Leu	Gln	Arg	Lys	Ile	Asp	Glu	Gln	Asn	Lys
	115					120						125			
Glu	Phe	Lys	Thr	Leu	Ser	Glu	Gln	Leu	Ser	Val	Thr	Thr	Ser	Thr	Tyr
	130					135					140				
Thr	Met	Glu	Val	Glu	Arg	Leu	Lys	Lys	Glu	Leu	Val	His	Tyr	Gln	Gln
145				150					155					160	
Ser	Pro	Gly	Glu	Asp	Thr	Ser	Leu	Arg	Leu	Gln	Glu	Glu	Val	Glu	Ser
			165					170					175		
Leu	Arg	Thr	Glu	Leu	Gln	Arg	Ala	His	Ser	Glu	Arg	Lys	Ile	Leu	Glu
		180					185						190		
Asp	Ala	His	Ser	Arg	Glu	Lys	Asp	Glu	Leu	Arg	Lys	Arg	Val	Ala	Asp
	195					200						205			
Leu	Glu	Gln	Glu	Asn	Ala	Leu	Lys	Asp	Glu	Lys	Glu	Gln	Leu	Asn	
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Asn	Gln	Ile	Leu	Cys	Gln	Ser	Lys	Asp	Glu	Phe	Ala	Gln	Asn	Ser	Val
225				230					235					240	
Lys	Glu	Asn	Leu	Leu	Met	Lys	Lys	Glu	Leu	Glu	Glu	Glu	Arg	Ser	Arg
		245						250					255		
Tyr	Gln	Asn	Leu	Val	Lys	Glu	Tyr	Ser	Gln	Leu	Glu	Gln	Arg	Tyr	Asp
		260					265						270		
Asn	Leu	Arg	Asp	Glu	Met	Thr	Ile	Lys	Gln	Thr	Pro	Gly	His	Arg	
	275					280					285				
Arg	Asn	Pro	Ser	Asn	Gln	Ser	Ser	Leu	Glu	Ser	Asp	Ser	Asn	Tyr	Pro
	290				295						300				
Ser	Ile	Ser	Thr	Ser	Glu	Ile	Gly	Asp	Thr	Glu	Asp	Ala	Leu	Gln	Gln
305				310					315					320	
Val	Glu	Glu	Ile	Gly	Leu	Glu	Lys	Ala	Ala	Met	Asp	Met	Thr	Val	Phe
			325					330					335		
Leu	Lys	Leu	Gln	Lys	Arg	Val	Arg	Glu	Leu	Glu	Gln	Glu	Arg	Lys	Lys
		340					345					350			
Leu	Gln	Val	Gln	Leu	Glu	Lys	Arg	Glu	Gln	Gln	Asp	Ser	Lys	Lys	Val
	355					360					365				
Gln	Ala	Glu	Pro	Pro	Gln	Thr	Asp	Ile	Asp	Leu	Asp	Pro	Asn	Ala	Asp

370	375	380
Leu Ala Tyr Asn Ser	Leu Lys Arg Gln Glu	Leu Glu Ser Glu Asn Lys
385	390	395
Lys Leu Lys Asn Asp	Leu Asn Glu Leu Arg Lys	Ala Val Ala Asp Gln
405	410	415
Ala Thr Gln Asn Asn Ser Ser His Gly Ser Pro Asp Ser Tyr Ser Leu		
420	425	430
Leu Leu Asn Gln Leu Lys Leu Ala His Glu Glu Leu Glu Val Arg Lys		
435	440	445
Glu Glu Val Leu Ile Leu Arg Thr Gln Ile Val Ser Ala Asp Gln Arg		
450	455	460
Arg Leu Ala Gly Arg Asn Ala Glu Pro Asn Ile Asn Ala Arg Ser Ser		
465	470	475
Trp Pro Asn Ser Glu Arg His Val Asp Gln Glu Asp Ala Ile Glu Ala		
485	490	495
Tyr His Gly Val Cys Gln Thr Asn Arg Leu Leu Glu Ala Gln Leu Gln		
500	505	510
Ala Gln Ser Leu Glu His Glu Glu Glu Val Glu His Leu Lys Ala Gln		
515	520	525
Leu Glu Ala Leu Lys Glu Glu Met Asp Lys Gln Gln Gln Thr Phe Cys		
530	535	540
Gln Thr Leu Leu Leu Ser Pro Glu Ala Gln Val Glu Phe Gly Val Gln		
545	550	555
Gln Glu Ile Ser Arg Leu Thr Asn Glu Asn Leu Asp Leu Lys Glu Leu		
565	570	575
Val Glu Lys Leu Glu Lys Asn Glu Arg Lys Leu Lys Lys Gln Leu Lys		
580	585	590
Ile Tyr Met Lys Lys Ala Gln Asp Leu Glu Ala Ala Gln Ala Leu Ala		
595	600	605
Gln Ser Glu Arg Lys Arg His Glu Leu Asn Arg Gln Val Thr Val Gln		
610	615	620
Arg Lys Glu Lys Asp Phe Gln Gly Met Leu Glu Tyr His Lys Glu Asp		
625	630	635
Glu Ala Leu Leu Ile Arg Asn Leu Val Thr Asp Leu Lys Pro Gln Met		
645	650	655
Leu Ser Gly Thr Val Pro Cys Leu Pro Ala Tyr Ile Leu Tyr Met Cys		
660	665	670
Ile Arg His Ala Asp Tyr Thr Asn Asp Asp Leu Lys Val His Ser Leu		
675	680	685
Leu Thr Ser Thr Ile Asn Gly Ile Lys Lys Val Leu Lys Lys His Asn		
690	695	700
Asp Asp Phe Glu Met Thr Ser Phe Trp Leu Ser Asn Thr Cys Arg Leu		
705	710	715
Leu His Cys Leu Lys Gln Tyr Ser Gly Asp Glu Gly Phe Met Thr Gln		
725	730	735
Asn Thr Ala Lys Gln Asn Glu His Cys Leu Lys Asn Phe Asp Leu Thr		
740	745	750
Glu Tyr Arg Gln Val Leu Ser Asp Leu Ser Ile Gln Ile Tyr Gln Gln		
755	760	765
Leu Ile Lys Ile Ala Glu Gly Val Leu Gln Pro Met Ile Val Ser Ala		
770	775	780
Met Leu Glu Asn Glu Ser Ile Gln Gly Leu Ser Gly Val Lys Pro Thr		
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<211> 1518
<212> DNA
<213> Homo sapiens
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120
ggtttcacca ctgcctcctt tggcaacttg agtggtggtg ttcccaccga gtttatggct
180
gcaaagatag gtcttttctc gtatttatgt ataaacaggt accagttttg attttattta
240
atcatttcac acattaacat acatgacaca tcaaaatgag aaatgcacag ttaaacggtt
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 1200  
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&lt;210&gt; 3286

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3286

Met	Lys	Ser	His	Pro	Gly	Gln	Lys	Thr	Val	His	Phe	Ser	Lys	Thr	Glu
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Lys	Asn	Leu	Arg	Tyr	Glu	Ala	Ala	Thr	Ser	Asp	Thr	Tyr	Arg	Lys	Gly
		20						25					30		
Lys	Asn	Asn	Asp	Asn	Thr	Arg	Pro	Ala	Pro	Pro	Pro	Lys	Ser	Cys	Cys
		35					40					45			
Cys	Glu	Leu	Arg	Leu	Gln	Lys	Arg	Thr	His	Thr	Val	Ala	Asp	Lys	Thr
		50				55					60				
Gln	Ala	Arg	Arg	Met	Phe	Glu	Ser	Gln	Ser	Ala	Leu	Ser	Leu	Val	Pro
65					70					75				80	
Val	Thr	Ser	Tyr	Val	Gln	Leu	Pro	Gly	Pro	Ile	Pro	Tyr	Ser	Asp	Cys
			85					90					95		
Arg	Leu	Arg	Thr	Glu	Asp	Ala	Pro	Leu	Leu	Ser	Leu	His	Phe	Asp	Leu
			100					105					110		
Leu	Phe	Pro	Leu	Lys	Thr	Arg	Arg	Pro	Ala	Phe	Pro	Lys	Thr	Ala	Trp

115                      120                      125  
 Pro Trp Leu Cys Thr Leu Phe Thr Thr Asp Gln Asn Ser Ile  
 130                      135                      140  
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 <211> 921  
 <212> DNA  
 <213> Homo sapiens  
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 180  
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 480  
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 720  
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<210> 3288  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 3288  
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 20                      25                      30  
 Ser Cys Ser Phe Ser Phe Gly Leu Ser Lys Tyr Pro Gly Pro Pro Cys

35 40 45  
 Ile Pro Leu Pro Phe Ser Cys Gly Cys Gly Ala Ser Leu Asn Arg Ser  
 50 55 60  
 Thr Phe Leu Phe Pro Ser Thr Arg Asp Arg Glu Ser Leu Lys Gly Ser  
 65 70 75 80  
 Gly Ala Pro Ser Ala His Leu Asp Gly Ala Gly Asp Ala Gln Arg Arg  
 85 90 95  
 Phe Arg Ala Leu Tyr Phe Gln Leu Gln His Ser Gln Val Phe Thr Ala  
 100 105 110  
 Gln Gly Asp Gly Ala Arg Val Thr Arg Asn Pro Gly Glu Gly Arg Ser  
 115 120 125  
 Phe Pro Arg Arg Gly Ala Thr Ser Phe Pro Asp Trp Ala Tyr Ala Gly  
 130 135 140  
 Gly Arg Gln Leu  
 145

&lt;210&gt; 3289

&lt;211&gt; 554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3289

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 554

&lt;210&gt; 3290

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3290

Met Ile Pro Gly Cys Leu Pro Trp Ser Phe Ala Phe Pro Ser Ser Ser  
 1 5 10 15  
 Pro Cys Lys Ala Arg Leu Leu Leu Pro Lys Gly Trp Gly Asp Val Leu  
 20 25 30  
 Gly Ser Leu Thr Gln Cys Arg Arg Ala Trp Val Pro Pro Trp Thr Gln

35	40	45
Ser Leu Pro Leu Gly Ala Ser Val Ser Ser Ser Val Asp Trp Val Ala		
50	55	60
Cys Ala Ala Arg Arg Gly Cys Leu Val Ser Gly Arg Trp Ser Thr His		
65	70	75
His Arg Val Glu Ser Lys Ala Ser Pro Leu Ser Pro Ser Leu Pro Trp		
85	90	95
Thr Ser Pro Leu Pro Ala Thr Leu Ala Gly Leu Cys Glu Trp Glu Gly		
100	105	110
Arg Pro Ala Leu Ala Gly Ser Ser Pro Val Pro Pro Ala Leu Ile Leu		
115	120	125
Gly		

&lt;210&gt; 3291

&lt;211&gt; 1075

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3291

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240
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420
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480
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540
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<210> 3292

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3292

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Trp Ser Ala Thr Pro Gly Pro Pro Trp Ala Pro Ser Pro Ala Thr Pro  
35 40 45  
Ala Val Arg Leu Pro Ala Pro Ser Pro Thr Ile Ala Ala Ser Val Pro  
50 55 60  
Pro His Trp Leu Phe Thr Trp Leu Ala Val Ser Val Ser Gln Pro Gly  
65 70 75 80  
Ser Glu Ser Xaa Arg Arg Pro Leu Pro Pro Pro Gln Leu Pro Pro Pro  
85 90 95  
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<210> 3293

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 3293

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2340

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<210> 3294

<211> 353

<212> PRT

<213> Homo sapiens

<400> 3294

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Gln	Arg	Gly	His	Met	Ala	Cys	Ser	Arg	Pro	Pro	Ser	Gln	Cys	Glu	Pro
			20					25				30			
Thr	Ser	Leu	Pro	Pro	Gly	Pro	Pro	Ala	Gly	Arg	Arg	His	Leu	Pro	Leu
	35					40						45			
Ser	Arg	Arg	Arg	Arg	Glu	Met	Ser	Ser	Asn	Lys	Glu	Gln	Arg	Ser	Ala
	50					55					60				
Val	Phe	Val	Ile	Leu	Phe	Ala	Leu	Ile	Thr	Ile	Leu	Ile	Leu	Tyr	Ser
65				70					75					80	
Ser	Asn	Ser	Ala	Asn	Glu	Val	Phe	His	Tyr	Gly	Ser	Leu	Arg	Gly	Arg
				85					90					95	
Ser	Arg	Arg	Pro	Val	Asn	Leu	Lys	Lys	Trp	Ser	Ile	Thr	Asp	Gly	Tyr
			100					105					110		
Val	Pro	Ile	Leu	Gly	Asn	Lys	Thr	Leu	Pro	Ser	Arg	Cys	His	Gln	Cys
	115					120						125			
Val	Ile	Val	Ser	Ser	Ser	Ser	His	Leu	Leu	Gly	Thr	Lys	Leu	Gly	Pro
	130					135						140			
Glu	Ile	Glu	Arg	Ala	Glu	Cys	Thr	Ile	Arg	Met	Asn	Asp	Ala	Pro	Thr
145					150					155				160	
Thr	Gly	Tyr	Ser	Ala	Asp	Val	Gly	Asn	Lys	Thr	Thr	Tyr	Arg	Val	Val
				165					170					175	
Ala	His	Ser	Ser	Val	Phe	Arg	Val	Leu	Arg	Arg	Pro	Gln	Glu	Phe	Val
			180					185					190		
Asn	Arg	Thr	Pro	Glu	Thr	Val	Phe	Ile	Phe	Trp	Gly	Pro	Pro	Ser	Lys
	195					200						205			
Met	Gln	Lys	Pro	Gln	Gly	Ser	Leu	Val	Arg	Val	Ile	Gln	Arg	Ala	Gly
	210					215					220				
Leu	Val	Phe	Pro	Asn	Met	Glu	Ala	Tyr	Ala	Val	Ser	Pro	Gly	Arg	Met
225				230					235					240	
Arg	Gln	Phe	Asp	Asp	Leu	Phe	Arg	Gly	Glu	Thr	Gly	Lys	Asp	Arg	Glu
			245						250				255		
Lys	Ser	His	Ser	Trp	Leu	Ser	Thr	Gly	Trp	Phe	Thr	Met	Val	Ile	Ala
			260					265					270		
Val	Glu	Leu	Cys	Asp	His	Val	His	Val	Tyr	Gly	Met	Val	Pro	Pro	Asn
	275					280						285			
Tyr	Cys	Ser	Gln	Arg	Pro	Arg	Leu	Gln	Arg	Met	Pro	Tyr	His	Tyr	Tyr
	290					295					300				
Glu	Pro	Lys	Gly	Pro	Asp	Glu	Cys	Val	Thr	Tyr	Ile	Gln	Asn	Glu	His
305				310						315				320	
Ser	Arg	Lys	Gly	Asn	His	His	Arg	Phe	Ile	Thr	Glu	Lys	Arg	Val	Phe
			325						330				335		
Ser	Ser	Trp	Ala	Gln	Leu	Tyr	Gly	Ile	Thr	Phe	Ser	His	Pro	Ser	Trp
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<210> 3295  
 <211> 690  
 <212> DNA  
 <213> Homo sapiens

<400> 3295  
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<210> 3296  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 3296  
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 Pro Arg His Met Gly Pro Ala Leu Arg Ser Leu Gln Val Lys Lys Gly  
 35 40 45  
 Thr Glu His Ala Asp Pro Leu Pro Phe Pro Ser Val Ser Leu Ser Gly  
 50 55 60  
 Phe Thr Val Gly Thr Leu Ser Glu Thr Ser Thr Gly Gly Pro Ala Thr  
 65 70 75 80  
 Pro Thr Trp Lys Glu Cys Pro Ile Cys Lys Glu Arg Phe Pro Ala Glu  
 85 90 95  
 Ser Asp Lys Asp Ala Leu Glu Asp His Met Asp Gly His Phe Phe Phe  
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 Ser Thr Gln Gly Pro Leu His Leu

115

120

&lt;210&gt; 3297

&lt;211&gt; 3176

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3297

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<210> 3298

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3298

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		20						25					30		
Cys	Leu	Trp	Val	Ser	Phe	Cys	Val	Cys	Val	Cys	Ile	Cys	Val	Cys	Val
	35					40					45				
Xaa	Leu	Cys	Ala	Cys	Met	Cys	Leu	Asp	Val	Cys	Phe	Cys	Met	Cys	Leu
	50					55					60				
Cys	Val	Cys	Leu	Tyr	Val	Cys	Ile	Cys	Val	Tyr	Val	Cys	Val	Cys	His
65				70				75						80	
Phe	Val	Cys	Phe	Trp	Val	Cys	Leu	Ser	Ala	Cys	Leu	Cys	Ile	Pro	Val
			85					90						95	
Ser	Pro	Cys	Val	Cys	Leu	Cys	Val	Cys	Ile	Cys	Xaa	Cys	Leu	Cys	Met
		100						105					110		
Cys	Val	Arg	Gly	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Ile	Glu	Arg
		115				120							125		
Glu	Gly	Glu	Arg	Lys	Gly	Ala	Thr	Asp	Gly	Ser	Ala	Trp	Lys	Val	Tyr
	130					135					140				
Pro	His	Ser	Gln	Pro	Trp	Glu	Glu	Ser	Val	Asn	Pro	Pro	Thr	Gly	Gln
145					150					155				160	
Asp	Gln	Leu	Trp	Trp	Cys	Leu	Ala	Asp	Ser	Gly	Asn	Val	Thr	Phe	His
			165					170						175	
Leu	Arg	Met	Gly	Leu	His	Phe	Leu	Gly	Lys	Glu	Cys	Arg	Ser	Trp	Ser
		180						185					190		
Leu	Lys	Glu	Cys	Phe	Phe	Phe	Pro	Phe	Val	Ile	Glu	Arg	Ala	Gln	Pro
	195						200					205			
Cys	Val	His	Trp	Leu	Thr	Val	Thr	Asn	Leu	Arg	Val	Gly	Asp	Ser	His
	210					215						220			
Arg	Glu	Glu	Thr	Glu	Gly	Thr	Ala	Asp	Ser	Glu	Gln	Glu	Ser	Gly	Gly
225				230						235				240	
Thr	Ser	Leu	Pro	Leu	Gly	Pro	Asn	Pro	Gln	Leu					
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<210> 3299

<211> 1387

<212> DNA

<213> Homo sapiens

<400> 3299

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&lt;210&gt; 3300

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3300

Met Ser Arg Cys Glu Thr Cys Gly Thr Glu Glu Ala Lys Tyr Arg Cys



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20	25	30	
Lys Ala Glu Leu Thr Cys Asn Gly Val Arg Asp Lys Thr Ala Tyr Ile			
35	40	45	
Ser Ile Gln Gln Phe Thr Glu Met Asn Leu Leu Ser Asp Tyr Arg Phe			
50	55	60	
Leu Glu Asp Val Ala Arg Thr Ala Asp His Ile Ser Arg Asp Ala Phe			
65	70	75	80
Leu Lys Arg Pro Ile Ser Asn Lys Tyr Met Tyr Phe Met Lys Asn Arg			
85	90	95	
Ala Arg Ser Lys Gly Ile Asn Leu Lys Leu Leu Pro Asn Gly Phe Thr			
100	105	110	
Lys Arg Lys Glu Asn Ser Thr Phe Phe Asp Lys Lys Lys Gln Gln Phe			
115	120	125	
Cys Trp His Val Lys Leu Gln Phe Pro Gln Ser Gln Ala Glu Tyr Ile			
130	135	140	
Glu Lys Arg Val Pro Asp Asp Lys Thr Ile Asn Glu Ile Leu Lys Pro			
145	150	155	160
Tyr Ile Asp Pro Glu Lys Ser Asp Pro Val Ile Arg Gln Arg Leu Lys			
165	170	175	
Ala Tyr Ile Arg Ser Gln Thr Gly Val Gln Ile Leu Met Lys Ile Glu			
180	185	190	
Tyr Met Gln Gln Asn Leu Val Arg Tyr Tyr Glu Leu Asp Pro Tyr Lys			
195	200	205	
Ser Leu Leu Asp Asn Leu Arg Asn Lys Val Ile			
210	215		

&lt;210&gt; 3301

&lt;211&gt; 2109

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3301

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2109

&lt;210&gt; 3302

&lt;211&gt; 323

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3302

```

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          20           25           30
Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
          35           40           45
Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
          50           55           60
Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
65           70           75           80
Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
          85           90           95
Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro
          100          105          110
Met Lys Val Lys Phe Thr His Gly Gly Thr Gly Ser Ser Gln Thr Ala
          115          120          125
Pro Thr Cys Gly Arg Glu Ser Ser Pro Arg Glu Thr Lys Leu Arg Met
          130          135          140
Ala Ser Met Glu Ser Pro Xaa Val Asn Ala Phe Pro Ala Gln Asn Asn
145          150          155          160
Tyr Gly Leu Tyr Asp Leu Leu Gly Asn Val Trp Glu Trp Thr Ala Ser
          165          170          175
Pro Tyr Gln Ala Ala Glu Gln Asp Met Arg Val Leu Arg Gly His Pro
          180          185          190
Gly Ser Thr Gln Leu Met Ala Leu Pro Ile Thr Gly Pro Gly Ser Pro
          195          200          205
Pro Gly Trp Ala Thr Leu Gln Ile Gln Pro Gln Thr Thr Ser Val Ser
          210          215          220
Ala Val Leu Gln Thr Gln Ala Gly Arg Gln Gly Ser Cys Lys Gln Pro
225          230          235          240
Gly Gly Asp Lys Glu Lys Ser Leu Leu Gly Ser Leu Ser Phe Pro Gly
          245          250          255
His Val Ala Asn Ser Ala Ile Pro Ser Ser Arg Ala Ser Ala Ser Gly
          260          265          270
Lys Asn Phe Pro Phe Pro Val Ser His Pro Ser Val Ala Gly Ala Ser
          275          280          285
His Gln Gly Arg Arg Gly Leu Ser Leu Leu Cys Phe Gly Glu Gly Ala
          290          295          300
Gln Cys Val Leu Thr Met Ala Gly Gly Gln Val Phe Leu Leu Glu Ala
305          310          315          320
Lys Tyr Tyr

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&lt;210&gt; 3303

&lt;211&gt; 699

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3303

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&lt;210&gt; 3304

&lt;211&gt; 233

&lt;212&gt; PRT.

&lt;213&gt; Homo sapiens

&lt;400&gt; 3304

Pro	Arg	Lys	Arg	Asp	Phe	Thr	Asn	Glu	Ala	Pro	Pro	Ala	Pro	Leu	Pro
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Asp	Ala	Ser	Ala	Ser	Pro	Leu	Ser	Pro	His	Arg	Arg	Ala	Lys	Ser	Leu
		20						25					30		
Asp	Arg	Arg	Ser	Thr	Glu	Pro	Ser	Val	Thr	Pro	Asp	Leu	Leu	Asn	Phe
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Lys	Lys	Gly	Trp	Leu	Thr	Lys	Gln	Tyr	Glu	Asp	Gly	Gln	Trp	Lys	Lys
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Cys	Tyr	Asp	Val	Thr	Glu	Tyr	Pro	Val	Gln	Arg	Asn	Tyr	Gly	Phe	Gln
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Ile	His	Thr	Lys	Glu	Gly	Glu	Phe	Thr	Leu	Ser	Ala	Met	Thr	Ser	Gly
		115					120					125			
Ile	Arg	Arg	Asn	Trp	Ile	Gln	Thr	Ile	Met	Lys	His	Val	His	Pro	Thr
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Thr	Ala	Pro	Asp	Val	Thr	Ser	Ser	Leu	Pro	Glu	Glu	Lys	Asn	Lys	Ser
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Ser	Cys	Ser	Phe	Glu	Thr	Cys	Pro	Arg	Ser	Thr	Glu	Lys	Gln	Glu	Ala
			165						170				175		
Glu	Leu	Gly	Glu	Pro	Asp	Pro	Glu	Gln	Lys	Arg	Ser	Arg	Ala	Arg	Glu

	180		185		190
Arg	Arg	Arg	Glu	Gly	Arg
	195		200		205
Pro	Ile	Gln	Gln	Ala	Leu
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Ala	Asp	Thr	His	Glu	Pro
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&lt;210&gt; 3305

&lt;211&gt; 2717

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3305

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&lt;210&gt; 3306

&lt;211&gt; 319

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3306

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Ile Ser Leu Val Met Lys Thr Pro Arg Val Ala Lys Asn Glu Ala Leu
      35           40           45
Trp His Pro Thr Leu Asn Leu Pro Leu Ser Pro Gln Gly Thr Val Arg
      50           55           60
Thr Ala Val Glu Phe Gln Val Met Thr Gln Thr Gln Ser Leu Ser Phe
      65           70           75           80
Leu Leu Gly Ser Ser Ala Ser Leu Asp Cys Gly Phe Ser Met Ala Pro
      85           90           95
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Lys Gly Ala Thr Leu Xaa Ala Cys Thr Thr Gly His Gly Xaa Arg Asp
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Ala Ser Leu Thr Leu Pro Gly Leu Thr Ile Gln Asp Glu Gly Thr Tyr
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Ile Cys Gln Ile Thr Thr Ser Leu Tyr Arg Ala Gln Gln Ile Ile Gln
      165          170          175
Leu Asn Ile Gln Ala Ser Pro Lys Val Arg Leu Ser Leu Ala Asn Glu
      180          185          190
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      195          200          205
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      210          215          220
Gln Val Ser Gly Ala Ser Phe Ser Ser Leu Arg Gln Ser Val Ala Gly
      225          230          235          240
Thr Tyr Ser Ile Ser Ser Ser Leu Thr Ala Glu Pro Gly Leu Cys Arg
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Cys His Leu His Leu Pro Gly His Thr His Leu Ser Gly Gly Ala Pro
      260          265          270
Trp Gly Gln His Pro Gly Cys Pro Thr Arg Ala Glu Asn Ser Leu Gly
      275          280          285
Ser His Leu Cys Gln Gln Ser Leu Pro Ser Cys Thr Asp Val Pro Gly
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&lt;210&gt; 3307

&lt;211&gt; 352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3307

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<210> 3308

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3308

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			20					25					30		
Pro	Arg	Trp	Glu	Pro	Cys	Leu	Gly	Gln	Gly	Gly	Arg	Val	Asp	Gly	Ser
		35					40					45			
Trp	Asp	Cys	Asp	Ile	Gly	Arg	Arg	Gly	Arg	Ser	Pro	Ala	Leu	Ser	Ser
	50					55					60				
Ala	Gly	Trp	Ala	Gly	Ile	His	Leu	Ala	Ala	Ser	Gln	Gly	Leu	Cys	Pro
65					70					75				80	
Ala	Gly	Trp	Ser	Leu	Cys	Cys	Pro	Asn	Gln	Val	Ser	Thr	Phe	Pro	Ala
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Pro	Met	Arg	Arg	Glu	Gly	Gly	Arg	Trp	Trp	Leu	Gly	Trp	Arg		
			100					105					110		

<210> 3309

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3309

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